



Benny Campbell is a Vocational Agriculture student at Booker T. Washington High School in New Orleans. Benny is receiving on-the-job training through the Co-operative Agriculture Education (CAE) Program. This is an excellent example of cooperation between business and the school system. Students attend regularly-scheduled classes in the mornings and receive their training during school released time in the afternoon. These students not only receive additional valuable training, but are also paid for their work by the business or industry in which they are employed. Benny answers questions about one of the plants he is responsible for at The Royal Orleans Hotel. One of these tourists is from Edmonton, Canada and the other is from Sacramento, California. Benny finds one of the most enjoyable duties of his job is answering the many questions asked him about the plants by guests from all over the world. (Photo from J. C. Simmons, Area Supervisor, Vocational Agriculture).



Volume 45

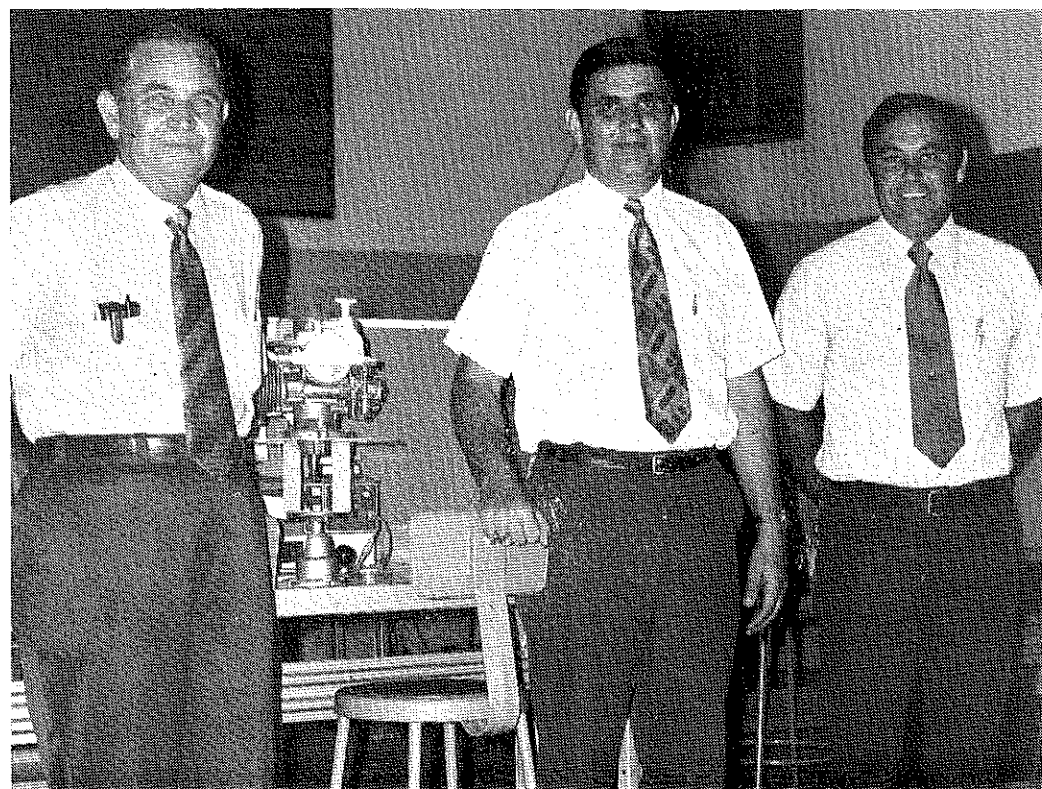
# Agricultural Education

April, 1973

Number 10

## Stories in Pictures

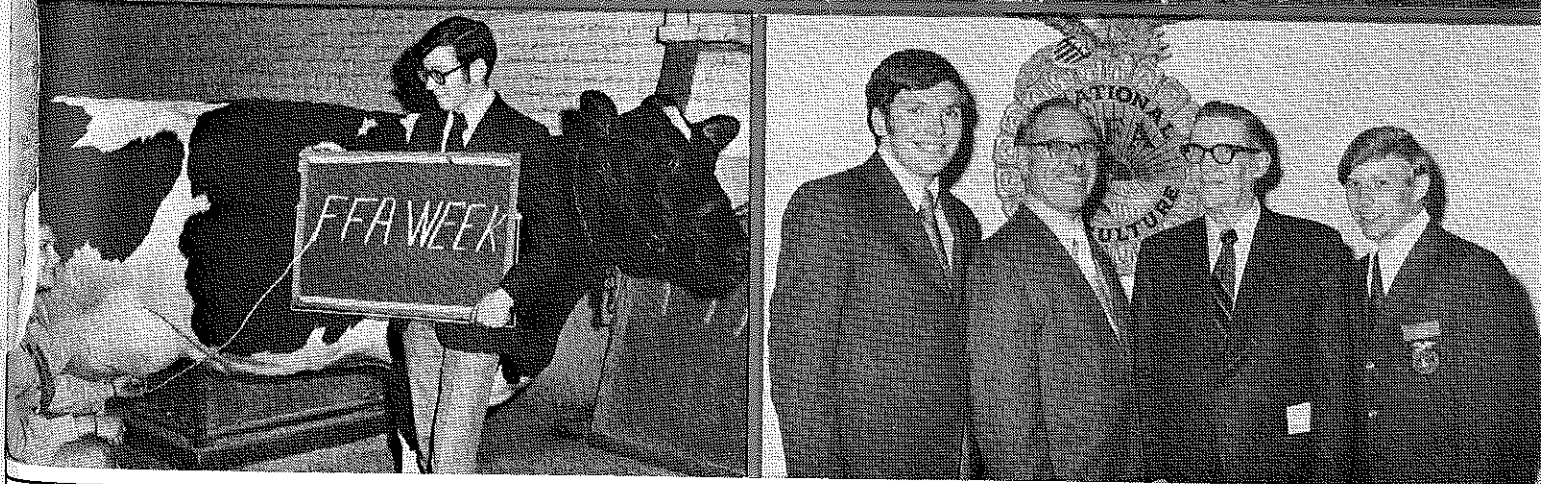
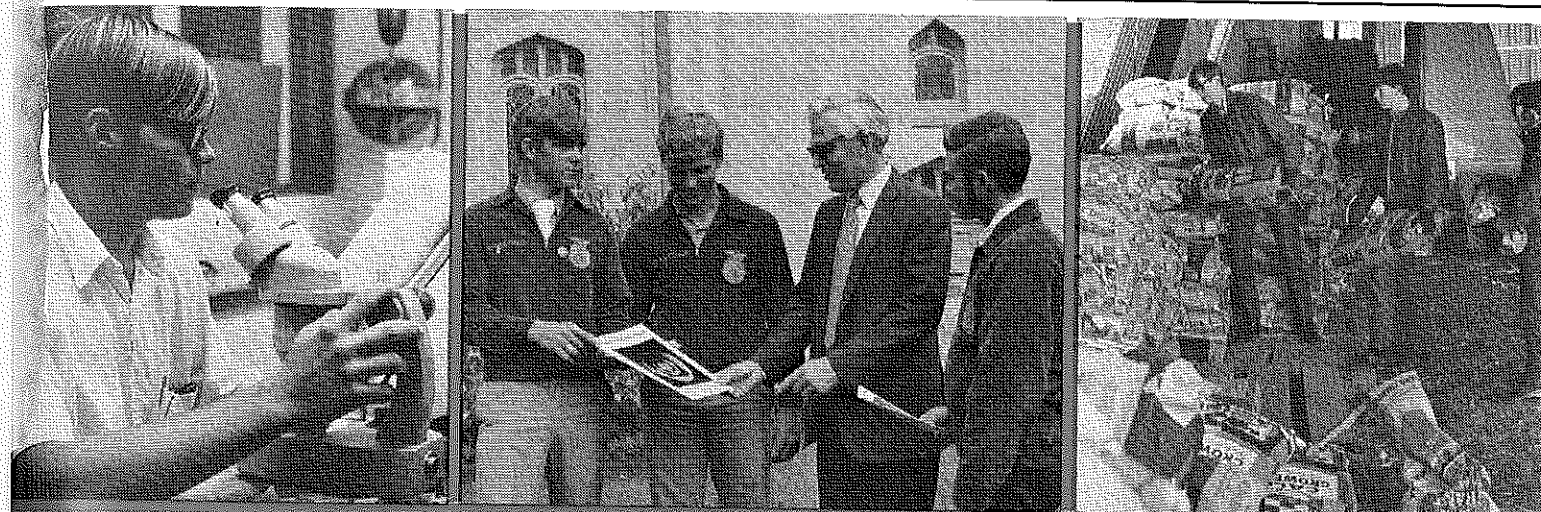
by Richard Douglass



**SONS FOLLOW IN THEIR FATHER'S FOOTSTEPS** — Curren Gaspard retired recently after thirty years of successful teaching, most of it as Instructor of Agriculture at the Marksville High School in Louisiana. The uniqueness of this retirement is that the vacancy created by Gaspard's leaving is being filled by his two sons, Lee and Landry. Both are qualified teachers of agriculture, having graduated from the same teacher training institution that their father attended.

This is unique in Louisiana as it is believed this is the first time sons followed their father teaching in the same high school.

Left to right — Curren, Lee and Landry are in the small engines lab in the Marksville High School Vocational Agriculture Department. (Photo from Ivan Baker, Supervisor, Louisiana.)



**Theme—CAREER EDUCATION:  
YOUTH ORGANIZATIONS AS  
AN INSTRUCTIONAL TOOL**





The  
**Agricultural  
Education**  
Magazine

Vol. 45 April, 1973 No. 10



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This publication is the monthly professional journal of agricultural education. The journal is published by THE AGRICULTURAL EDUCATION MAGAZINE, INC., and is printed at the Lawhead Press, Inc., 900 East State Street, Athens, Ohio 45701.

**SUBSCRIPTION PRICE:** \$3 per year. Foreign subscriptions \$4. Student subscriptions in groups (one address), \$1 for October-May. Single copies and back issues 50 cents. In submitting subscriptions, designate **new** or **renewal** and address including ZIP code. Send all subscriptions and requests for back issues to Harlan E. Ridenour, Business Manager, AGRICULTURAL EDUCATION MAGAZINE, Box 3843, Columbus, Ohio 43214.

Second-class postage paid at Athens, Ohio.

Send articles and pictures to the Editor or to the appropriate Special Editor.

COVER PHOTO

Youth Involvement — How can we more effectively involve youth and youth organizations in a career oriented curriculum? Vo-Ag Instructors across the nation share their ideas. (Upper left) Frank Eisenschenk has his students perform regular insect surveys in citrus groves near the Polk Vocational Technical School. They find that not all of the living organisms found on citrus trees are harmful. (Photo from Frank Eisenschenk, Eaton Park, Florida).  
(Upper center) Clark County Kentucky Soil Conservation District has a Junior Board of Supervisors. They take an active part in District activities, including Soil Stewardship week. Here, Reverend Charles Turkington, of the First Methodist Church of Winchester, discusses this project with Vo-Ag students (left to right) David Hall, Ronnie Glover and Herb Devary. (Photo by Gordon S. Smith, USDA-SCS).  
(Upper right) You can't learn how to stack feed by reading a book. (Upper right) Left to right—Richard Droll, Kevin Lockie, and Larry Lynch, learn by doing. They also learn about feed wastage as indicated by the broken bags in the foreground. (Photo from Garland Ashbacher, Kirkwood Community College, Cedar Rapids, Iowa).  
Every aspect of farm operation can become a part of a student's experience through IMPROVEMENT PROJECTS. (Middle left) Ralph Woodin advises us to build additional skills beyond those included in the student's PRODUCTION PROGRAMS or Agri-business Experiences. (Photo from Ralph Woodin, University of Tennessee).  
(Concluded on page 227)

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From Your Editor . . .



Roy D. Dillon

The theme of this issue relates to using the youth organization as an instructional tool. This infers that someone (hopefully the teacher) is managing that tool so it functions as a learning mechanism.

The student who sees his or her student organization as something more than "a club" will be more likely to participate. How do the students in your school view the FFA? Is it still a "bunch of farmers"? To what extent is the image of vocational agriculture for agricultural occupations being carried into the planned and publicized activities of your FFA?

In many communities the FFA image is strong due to well planned, carried out, and publicized activities. Many present and prospective students, guided by parents, will make the decision to take or not take vocational agriculture based upon what they believe the FFA participation can do for them. If that image is too narrow (farming or ranching only), some prospective students may be lost who could have benefited from vocational agriculture and a broader-based student organization.

While advancing the above argument, I realize that an

Editorials

HOW DO YOUR STUDENTS  
VIEW THE FFA?

effective *FFA Program of Work* should be tied closely to the farming, ranching, and agri-business emphasis in the local community, and of course this will vary. However, considering the tendency of graduates to move away from the community, due consideration must be given to relating the FFA to agricultural occupations in the larger region or state geographical area if students migrate there.

The decisions made by the National FFA at recent National Conventions, and being implemented through "FFA Update," demonstrate the move to restructure FFA so students in the several types of agricultural occupations courses in high schools can relate to FFA activities. Some innovative teachers are helping students form special interest groups within the local "Parent FFA," so opportunities can be provided for participation by as many students as possible in leadership, social, and award programs relating to their area of interest.

The challenge to today's agriculture teacher is to critically evaluate the role the FFA should be playing in the lives of present and prospective agricultural occupations students in the local community, and lead the students in planning activities that are an integral part of the broader instructional program.

—RDD

USE THE FFA AS A CAREER EDUCATION TOOL

Jim Guilinger  
*Alternate Vice President, Region IV NVATA, and Vo-Ag Instructor  
Sycamore, Illinois*



Jim Guilinger

Many methods are employed by teachers of Agriculture to increase the learning desire of students. We all use varied teaching methods, employ the use of different visual aids and in general, attempt to involve the student in the learning process.

At Sycamore, and in fact during my entire teaching career, I have used the FFA as one of my most effective tools for conveying career education to students. There are many lengthy definitions of Career Education. However, to me it is the training and developing of a student to enter the "world of work" upon graduation and be able to fill a position, yet be able to change as society changes. One of our mistakes in Vocational Education was to train a student for a particular job and then have no job available at the completion of the instruction and training due to changes in society.

For Career Education to be effective, it must develop the total students' ability to fill a position at a certain time, yet have prepared that student with the understanding that he will have to re-adapt himself for other positions as society changes.

One of the constants in each person's life is change. We must be prepared to meet and accept change with the knowledge that change is a constantly evolving process which continues forever. Youth organizations, such as the FFA, can prove to be one of the best instructional tools we have to prepare a student for a world of reality and change. We can expose the student to the many careers in Agriculture and to the decision-making process which will confront him in later life.

I start using the FFA and its award fields in Basic  
(Continued on next page)

The most effective FFA tool used at Sycamore is the FFA Cooperative.

Agriculture for the freshmen students. Each student receives all the FFA award application books such as Forestry, Beautification, Electrification, Product Processing, Fish & Wildlife, Outdoor Recreation, Safety, and the regular Agriculture Experience Record Book used in Production Agriculture.

At Sycamore two credits in Agriculture are given, provided the student receives a passing grade in the course and conducts an experience program using at least one of the FFA Award or Experience Record books. Each student therefore starts to build toward a goal he sets in his first year to achieve both a career goal and possibly an FFA Award Honor by the time he is a Senior.

All Sycamore students in Agriculture receive instruction in Parliamentary Procedure and Public Speaking. All are required to participate in the Chapter Contests for local awards and a grade in the Agriculture classwork. Our local Chapter Parliamentary Procedure Contest generally has at least eight teams participating, from which we select the Chapter team members to compete at the Section level.

The Chapter has had a public speaking representative in the Extemporaneous or Prepared Contest on the State preliminary or finals contests four of the past six years.

We require each student who enrolls in Agriculture to become an FFA member. The course of Agriculture is elective in our school system and we feel the FFA is a total part of the instruction in Agriculture and that the average student is not aware of the possibilities the organization presents to a local student to achieve. We have students who enroll as Seniors without ever having any previous Agriculture who feel they have benefited from their activities in the FFA and Agriculture classwork.

At present we offer five courses in Production Agriculture, one course in Related Agriculture with students being released at noon to work on an agriculturally related job, and one course in Horticulture. Next year the Horticulture program will be doubled with the addition to the facilities of a 20' X 60' greenhouse which has recently been constructed.

The most effective FFA tool used at Sycamore, however, would definitely be the Sycamore FFA Cooperative which was started four years ago.

As an outgrowth of instruction in the Farm Management class, the members studied and decided to develop a Cooperative with educational goals as one of the reasons for its development. The members of the Farm Management class studied cooperatives and their organization. They also developed a Constitution and By-Laws for the Sycamore FFA Cooperative.

The Chapter elects a complete set of Cooperative Officers and a Board of Directors each year in January. This group appoints or selects a Co-op Manager to operate the Sycamore FFA Cooperative. The Sycamore FFA Chapter owns all A stock which is capital and each Chapter Member is issued one share of B stock which is voting stock. All funds of the Cooperative go to the Sycamore FFA Chapter.

At present the Sycamore FFA Cooperative operates 160 acres of crop land, has 40 head of registered Southdown Sheep which are located at the high school, and owns over \$13,000 worth of buildings, livestock equipment, two tractors, a self-propelled combine, planters, plows, cultivators and wagons needed to operate the total farming operations.

The Cooperative purchases seed, feed, fuel, fertilizer and herbicides and sells grain, lambs and wool. It hires FFA members in the operation at a salary during the summer months and after-school hours to work in the operation.

City students are able, under this operation, to receive actual experience with livestock and crop production, as well as learning the decision making process in selecting seeds, fertilizer, feeds and time to market crops, livestock and livestock products. Presently there are approximately twenty city students in the total of ninety-three enrolled in Agriculture and the FFA.

Profits from the Cooperative are used to improve and expand the total operation. An example which can be given is the purchase of a completely overhauled IH "706" tractor with a four-bottom semi-mount plow and four-row rear mount cultivator this past winter. The entire Chapter membership discussed and voted to trade in an older and smaller tractor on the newer and larger equipment. The Chapter Cooperative decision then went before the Agricultural Advisory Council, who in turn also supported the purchase. Part of the purchase price will be carried by the local bank on a two-year note which is signed by the council members in support of the Chapter.

All these financial items are studied by the entire Chapter membership, thus providing knowledge concerning financing and how it actually works. All of the students participate in determining whether to contract grain crops in advance of harvest, the purchase of seed, fertilizer, crop insurance and the determination of rental contracts with five different landlords.

Resource people such as agricultural bankers, insurance personnel, farm equipment dealers, seed salesmen, fertilizer and grain dealers all visit with the students either in class sessions or at FFA night meetings to discuss their product or services and how it might be beneficial to the local Chapter.

The local Chapter meetings sometimes become quite involved with the decision to purchase or sell some Chapter commodity.

I firmly believe this direct participation in the decision-making process has a direct correlation on the students we have who advance in the FFA, into Junior College and four-year institutions, or directly into an agricultural career.

## Themes For Future Issues

July — Career Education: Unique Instructional Programs and Materials

August — Career Education: For More Effective Teacher Education and Supervision

September — Career Education: Articulation Among Local, Area and State Programs

October — Career Education: Upgrading Adults

November — NVATA Silver Anniversary Issue

December — Career Education: Accountability In Evaluation

## "NOT JUST TALK--BUT ACTION"

Wilton Johnson  
FFA Advisor

North Branch High School  
North Branch, Minnesota



Wilton Johnson

Everyone wants career education. It's wanted for more jobs, better jobs, more money, more free time, more travel, more fun, more benefits.

How about a sideline career for everyone — HELPING. Help America, help communities, help others — HELP OUR ENVIRONMENT. All people should make helping a career. Young, old, rich, poor, busy, idle, little, big, boys, girls, men, women, you, I, organizations, clubs, groups — everyone can help, and learn. Part of the FFA's motto says "Doing To Learn." Do we practice this?

What did you do for environment in 1972?

What will you do for environment in 1973 — or the future?

Some people say everything is OK. Nature takes care of itself. Don't get riled up. There is no problem. There is enough for everyone. Don't worry. Everything will work itself out. Malarky! That philosophy won't help. People start pollution — people must stop it.

Environment creates lots of talk. Too much talk. More action is needed. Talk about problems. Complain. Criticize. Cuss. Yelp. Scream. Other guy's fault. Can't be done. Won't do any good. Change this. Change that. Dirty water. Can't breathe. Too much noise. Litter everywhere. Junk cars. Less wildlife. Recycle more. Resources destroyed and used up. Not enough parks. Public places in poor shape. Talk, talk, talk, and more talk. Not enough action. DOING ACTION. Why isn't there?

Talk only helps. Work gets a job done. Quote: "Five minutes work for every word said would lick environmental problems." We need more hands dirtied, more backs bent, more arms and legs used, more tired muscles. We need more action — by everyone. Why not get some going — now.

Many give excuses. Too busy. No money. No contacts. No literature. No cooperation. No interest. No ambition. Poor results. No way. No problems. Quote: "Excuses only satisfy those who make them." Everyone can do something. Any tiny project will help. Try some — ACTION.

Plant trees, shrubs, flowers for beautification.

Test water for contamination — wells, lakes, rivers, creeks, villages.

Take pictures of good and bad situations — show to classes and public.

Pick up litter, rubbish, and junk — ditches, parks, rest areas, streets, private property, alleys, schoolgrounds, beaches, creeks, empty lots, trails, sidewalks, everywhere.

Install trash receptacles — always more needed.

Plant less litter yourself.

Start recycling centers — cans, bottles, paper, tires.

Raise and release pheasants, wild ducks, turkeys, grouse, Smokey Bears.

Get other organizations working. Initiate projects for them.

Paint public buildings and shelters.

Hand out litterbags for cars and boats.

In October of 1972, The North Branch FFA Chapter was selected as the winner of the Youth-Chapter of a National Organization category in Keep America Beautiful's 1972 Award Program.

- Get rid of dead and diseased trees.
- Carry out an "Earth Week" poster contest in school — all grades.
- Start a "Junk Car and Farm Machinery Removal Program."
- Hand out environmental literature.
- Show Councils, Leaders, public the problems in your area.
- Feed wildlife when natural food becomes scarce.
- Build bird houses and feeders.
- Need some talk but always more action.
- Build Wood Duck houses and other duck nests.
- Pile up brush for wildlife cover.
- Hold community environmental meetings.
- Pick up bits of paper — even a gum wrapper.
- Purchase or make posters and signs — display them.
- Encourage and keep noise levels down.
- Start and develop a park.
- Develop a school ecological plot.
- Purchase and distribute environmental buttons and decals.
- Develop walking, biking, and horse trails.
- Supervise a camping trip.
- Look for plant and tree diseases—publish and advertise results.
- Record and report weather information and conditions.
- Start projects for school classes — all grades from 1-12.
- Build an environmental booth for a fair.
- Show environmental moving films — both school and public meetings.
- Conduct more class field trips. Promote preservation of nature.
- Plant soil conserving plants — prevent erosion.
- Purchase and distribute bumper stickers.
- Provide awards for good conservation practices.
- Repair trash receptacles — put eye catching decals on them.
- Get rid of old buildings.
- Start "Acres for Wildlife" programs — Minnesota has them.
- Purchase and lend equipment for environmental use — chain saws, mulchers, etc.
- Talk yes — but get more action going.
- Provide literature for libraries, doctor's and dentist's offices, barber shops.
- Provide articles and pictures for newspapers.
- Wear anti-litter shirts.
- Collect leaves and grass for compost piles.
- Tune up engines — prevent air pollution.
- Survey community problems — publicize them.
- Apply for government grants for environmental projects.
- Construct wildlife ponds.
- Obey and help enforce hunting, fishing and other environmental laws.
- Plant trees, bushes, and other plants for wildlife food.
- Record nature sounds for classroom and public use.
- Conduct demonstrations on environmental protection and preservation.
- Set up a list of sources from which individuals and organizations can order materials and literature.
- Start some action now — if now isn't the right time, when will be?
- Dig a little deeper into organization's treasury. Use more money for more projects.
- Start a giant local or state environmental project for 1976 — now.
- Take samples from suspected diseased trees and have tested.
- Build some park of village benches and some picnic tables.
- Landscape a public area.
- Stop creating environmental problems yourself — aren't we all guilty?
- Carry out door-to-door collection campaigns — bottles, papers, cans.
- Compile and publish statistics on environmental problems and conditions.
- Set up conservation displays in schools.
- Start a wildlife refuge.
- Develop a roadside rest area.
- Walk and bike. Drive less.
- Develop a swimming beach.
- Establish or provide better fish habitats.

(Concluded on page 226)





Allen N. Hornbrook  
Agricultural Occupations Instructor

# THE NEW FFA: A RELEVANT TOOL IN CAREER EDUCATION

Paris High School  
Paris, Illinois

With today's emphasis on Career Education, the FFA can be used as an integral tool in preparing youth for the world of life and work. Through FFA programs and activities its members can explore and become acquainted with and also relate to abundant career opportunities that exist in agriculture.

An active FFA can be used to accomplish one of the first steps in career education, that of acquainting students with agricultural careers. Once the student has become acquainted with the career opportunities, the youth organization holds the key to help him explore and develop his attitudes and abilities toward the job of his choice. Ideas put forth in the emphasis of the new FFA provide this opportunity. These ideas of making the FFA more inclusive of all the phases of agriculture instruction make the FFA a vital part in career education.

One of the fundamental needs of an FFA is a comprehensive program of activities directed toward instructing individuals to achieve the major goals of career education. Several of these goals might be to explore career opportunities, to develop the individual, his attitudes, and abilities, and to provide a training opportunity.

Let's look at how some of these goals can become realistic in the FFA as an instructional tool.

The classroom teaching coupled with the FFA Foundation Award programs, contests, and various activities provides a means whereby the general knowledge can be given the "hands on" specific application and stimulate personal growth. Active participation in the

**One successful approach is to teach subject matter in the classroom, thus exposing all students to career opportunities in that area; then a certain amount of time can be spent outside of classroom time with students interested in contests in that area.**

broadened Foundation Award areas provides a channel to the ultimate goals of career education. After classroom discussion of agricultural career opportunities, the FFA awards program is a continuous teacher in helping the student to explore and excel in his field of interest. Students on agribusiness placement programs have the opportunities to relate their interests, attitudes, and abilities to the different agricultural careers.

An agribusinessmen — FFA luncheon during National FFA Week provides an excellent opportunity to expose members to the endless array of agricultural careers.

New programs such as "Building Our American Communities" is a good source for career orientation. An example of a BOAC activity would be landscaping the grounds surrounding a newly built community hospital. Here a student would become involved in learning about careers in landscaping, forestry, turf management, etc., not to mention the personal growth opportunities gained from working and planning with other people.

A valid program designed to acquaint students with careers in agriculture can also be attained through the development of contest areas. Learning with involvement through contests helps to make classroom instruction more relevant. A contest should not be used as a means for an FFA chapter to exploit the way of winning but to give students the opportunity to apply their classroom instruction and to see career possibilities in action. Contest areas have been developed from the sectional level



Robert E. Wolf  
Agricultural Occupations Instructor

up through the national level. Live-stock judging, livestock products, grain judging, mechanical abilities, ornamental horticulture, soil judging, tractor safety, and parliamentary procedure are all examples of what experiences are available by using the FFA as an instructional tool to careers.

The instruction program should be designed to give instruction related to the interests and desires of the students. The above mentioned contests might not be adapted to all specific national regions but they do serve as examples of what can be included in an instructional program. The practicality of teaching for contests rests in the approach taken to them. It is not feasible to teach all contests to all students because only certain students have interests relative to these areas.

The preparation for contests outside of class gives a better atmosphere for a concentrated effort of training for the contest. This method has also shown success in the past in that many times enough interest has been shown that extra participants will take part in the contest.

Again, it is important to say that the use of contests is to expand the spectrum of the individual for his own development and knowledge of careers in agriculture.

In conclusion the FFA youth organization can be used to develop programs and activities related to careers. With community involvement in these programs and activities the student can develop a fuller understanding of career opportunities. Hopefully the exposure will help a student find a career of his interest and thus attain the ultimate, the development of his abilities and attitudes for that career.

These ideas incorporated in the instructional program will help make the curriculum more relevant to all students. ♦♦♦

# FFA ACTIVITIES: MOTIVATORS TO AGRICULTURAL CAREERS

Ray Griffith  
Vocational Agriculture Instructor  
Riverview High School  
Warsaw, Ohio



Instructor (no hat) and River View Meats Team. All boys received a Gold Medal on national level. One student scored number 1 in National Contest at Kansas City. FFA members have viewed careers in Meat Industry throughout the state and midwest.

the student — in proportion to his interest and desire to succeed.

However, training for competition in contests can go beyond the technical and principles of any given contest. All the areas of the above contests offer career opportunities. To train students in FFA activities, such as those available in Ohio, requires the use of outside resources. These resources will involve *people, facilities, and materials*. Students who are motivated into a competitive contest spirit can also be motivated at the same time to the career opportunities offered in the training and contest experience.

Students that spend two or more years becoming efficient in a contest area will also become aware of the careers of that area if stimulated by the instructor of Vocational Agriculture. For example, meat judging training can bring a student into the awareness of the following careers:

1. Slaughterhouse Operation
2. Meat Curing
3. Meat Cutting
4. Meat Marketing
5. Meat Grading
6. Meat Inspection
7. Meat Transportation
8. Livestock Buying
9. Meat Research

Critics of the FFA judging and competitive skills contests, or those who have never seen the need to encourage students in this area might well find new fields of participation that can yield fruitful careers for their students of Vocational Agriculture.

The FFA has long been a motivator for bringing about the development of leadership, citizenship, and cooperation.

FFA can be a motivator in the field of career education if instructors can see the possibilities.



Ray Griffith

Vocational Agriculture students in the classrooms of American high schools are often forced to face the very real fact that farming careers are hard to come by in the 1970's. This means that careers other than farming are going to be in the future of a great number of rural students.

Students of rural areas, and especially those with farm backgrounds and production agriculture experience, are *premium prospects for the agriculture world of work*. It would seem that we waste a tremendous amount of valuable manpower resources by letting rural youth flounder around and by not stimulating them to hitch on to a career in agriculture.

Many students of Vocational Agriculture have lived all of their lives in or around agriculture. Add to this heritage, four years of Vocational Agriculture training and FFA experience. This combination of the rural agriculture background and agriculture training gives students of Vocational Agriculture the best prerequisites possible for careers in the world of agriculture outside of farming.



Students working on a tractor demonstrate the tractor trouble-shooting contest, which introduces FFA members to careers in the agricultural mechanics and machinery field.

Many vocational agriculture students have gone to the business world or the assembly line because they were never motivated to seek a career in agriculture; therefore, the need for career motivation.

An active, complete FFA program can be a source of motivation and an instructional tool that can expose its members to careers in agriculture. The aims and purposes of the FFA include a statement to the effect that, "the FFA is to develop in its membership an understanding of agriculture and job opportunities."

One area of FFA sponsored activities open to Ohio students of Vocational Agriculture is the competitive judging and skill demonstration contests. Presently, FFA sponsored activities offered to members are as follows:

## JUDGING CONTESTS

- Dairy Cattle
- General Livestock
- Wool
- Poultry
- Agromony
- Soil
- Horticulture
- Meat
- Milk
- Farm Mechanics
- Floriculture

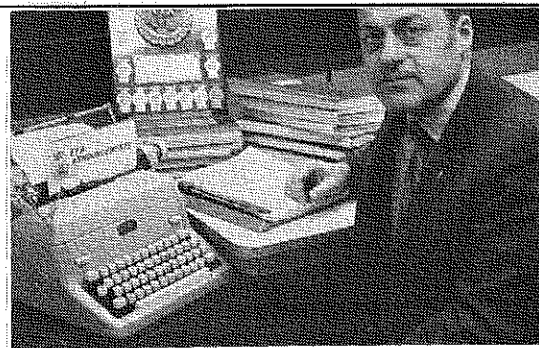
## COMPETITIVE SKILLS DEMONSTRATIONS

- Small Gas Engines
- Timber Cruising
- Tractor Trouble Shooting
- Tractor Engine Skills

Participation in these activities needs to be encouraged by the advisor. Participation involves more than a mere scratching of the surface; it means getting the student actively involved. Students should be introduced to these activities as freshmen by encouraging each student to become competent in at least one area — sense of accomplishment and success is at hand for

## FFA: A DOING AND LEARNING TOOL

Ray Erwin  
Vocational Agriculture  
Senior High School  
Stillwater, Minnesota



FFA Advisor Ray Erwin, Stillwater, Minnesota, Honorary American Farmer, continues daily FFA Announcements for each class meeting. The daily newsletter is read in each class by a class secretary and a copy is posted on the FFA Bulletin Board. This practice, started during the 1961-62 school year, has recorded events for members and has been a chronology of events leading to 11 straight National Chapter Awards.

"I'm taking FFA."

A questionable reply by a student of Vocational Agriculture. But is it? Many of the most highly motivated and successful students of Vocational Agriculture courses in many schools righteously believe they are taking "FFA" and not multi-syllabic Vocational Agriculture. Especially is this student identification with "FFA" and not with Vo-Ag prevalent among the younger siblings of former student-members.

Although anathema to many pedagogues, FFA does present a relevance for today's individualized learning as well as for the student, personally. There is irony that FFA and the doing to learn is nothing really new but can be newly identified for progressive curricula.

A club is a club is a club continues as a conventional consideration of FFA by many educationalists. A student-operated and organized group for students within or without a curriculum is the same as any other—or is it? "Fair and equal" treatment for all clubs is in many orders of the day for co-curriculars in far too many schools, and too often has fixed FFA as nothing more than a club. And, perhaps, this remains a far too prevalent philosophy toward FFA by advisors, teacher-trainees and state department of education officials.

Unfortunately, many FFA advisors do little to overcome the "club" atmosphere and are continuing activities which are not relevant to the eight cluster areas of Vocational Agriculture. On national and state levels the FFA constitutionally refuses to restructure many salient features and persists in maintaining far too many barriers to

relevant application. FFA continues to have problems in retaining the traditional while continuing the change.

Some features of FFA serve to freeze FFA as just another club for students. Wide variations and lack of standards of activity for FFA chapters and their individual members perpetuate a wide disparity of application school to school. This disparity has established a lack of appreciation by school administrators and boards of education. There are few known requirements for basic levels of application of FFA within the Vo-Ag curriculum as there are for technology and other facets of Vocational Agriculture in the local school.

The strength of many departments of Vocational Agriculture has been associated with strong FFA chapters and this has too often resulted from fortunate and coincidental happenstances of the vitality of the advisor and the academic freedoms in a particular school system. There have been too few applications of guidelines for integration of FFA into the curriculum, and those available inputs have not been utilized because of strong and mistaken identification with non-requirements. Add to the formula the turnover of FFA advisors and the lack of personal continuity and the place of FFA in the curriculum and in the community has suffered.

A very first in using FFA within the curriculum (or as the curriculum) is the establishment of the validity of FFA. A real eye-opener remaining unnoticed in libraries of state departments of education and in teacher-training institutions has been slipped into Handbook VI of the Office of Education, HEW: "Standard Terminology for Curriculum and Instruction in Local and State School Systems," 1970. In defining Academic Co-Curricular Activities, the Handbook make a point by saying: "Future Farmers of America activities are *uniquely* (italics added) (by Act of Congress, P.L. 740)

There have been too few applications of guidelines for integration of FFA into the curriculum.

an integral part of all instructional programs in agriculture. Time is frequently provided in regular classes to familiarize pupils with the objectives, functions, and activities of FFA." And FFA was but one of more than 100 Co-curriculars defined and coded! And FFA is the only co-curricular given such status by statute.

But the final and complete integration of Vocational Agriculture and FFA within the same curriculum remains a challenge. Much of the Vo-Ag technology has recognition in FFA, but not all. With the advent of the eight-cluster organization for Vocational Agriculture, there have been great strides. Recent developments by the National FFA in the area of Proficiency Awards serve as excellent guidelines for both curriculum writing as well as individualized achievement evaluations. (As an aside at this point: Now if there could only be a "marrying" of FFA degrees with the Proficiency Awards, with FFA degrees tied directly such as a Green Hand degree in Beef Production Proficiency, etc.).

Another very important potential input into local Vo-Ag-FFA curriculum is from the National Chapter Award application where powerful and relevant ideas can be extracted to bring student "doing to learn" activities in line with the "learning to do" of the curriculum.

Building Our American Communities (BOAC) and the National FFA Safety Programs can either be the bases or the resources for additional Vo-Ag curriculum inputs. The International Programs of FFA can be brought in with a study of foreign agriculture.

Many states have similar or parallel state programs. An example is Minnesota's venture into wildlife development which furnishes ready-made curriculum guidelines and references for local curriculum in Natural Resources. Both course objectives and individual objectives with tailor-made evaluations may be extracted by the Vo-Ag-FFA instructor.

A source of the most directly related  
(Concluded on page 227)

## FFA: A CAREER EDUCATION CARRY-OUT TOOL

Myron Sonne, Agricultural Marketing  
and Management Instructor,  
Mitchell Area Vocational Technical School;  
Mitchell, South Dakota



Myron Sonne

Because of ineffective use, many times we look at our youth organization, the FFA, with disfavor, disenchantment, and sometimes even disbelief. Have you considered who the leader of the program really is? In case you have forgotten you are still the pilot of this plane and without a pilot the plane is useless.

Take a look at a few ways that we can use the FFA as a carry out tool for our instruction:

### Leadership — Self Development

- Holding Office—responsibility
- Parliamentary Procedure usage
- Record Keeping—Secretary, Treasurer, etc.
- Cooperative Activities
- Building Self Confidence
- Encourage Thriftiness
- Meeting Other Persons

### Civic and Personal Pride

- Building Our American Community
- Community Service projects
- Public Relations Development
- Participation in Local, State, and National Activities
- Camp Participation
- Attractive Dress and Appearance

### Evaluation

- Electing Officers
- Judging Work
- Program of Work planning and adoption
- Transacting Business

This is just a short list that you could expand upon. Most could fit in any position, there is no magical arrangement but let us look at them as they are.

### Leadership

You as an instructor work for developing leadership ability in all students, call it self development or call it what you wish, the end product not the title is important. Parliamentary procedure is very important. The stu-

dent learns how to express himself properly at a meeting or how to conduct that meeting. Certainly keeping records and being thrifty is something we all stress when teaching the management aspect of our programs.

Working with others while yet being confident of his own ability is a must when training people in production agriculture or agriculture related occupations. Of much importance is the ability to meet people. In this era it is important to make contacts no matter what your agriculture business is.

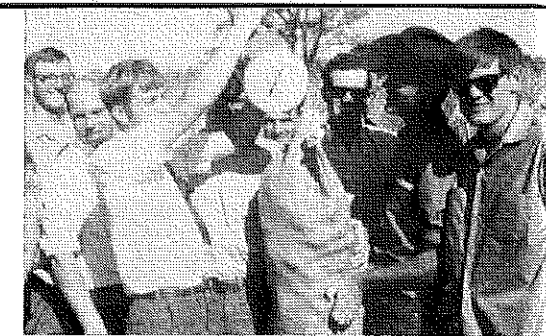
We are working to develop a person that can be his own and/or someone else's employer as well as being able to be an employee. He has the capabilities to make contacts, keep books and has confidence in doing so. If we do not have an organization like the FFA to give him some practical experience, learning while doing, he may learn while on the actual job and it could be a costly experience.

### Civic and Personal Pride

Certainly all of us as good American citizens should develop civic and personal pride. The new BOAC program as well as the older community service projects help these young people develop habits that they will be more likely to keep throughout their lives.

Participation in local, state, and national FFA activities will again be habit forming and will lean toward farm oriented organizations, politics, sports, etc. as they become established in their careers.

Personal pride can be developed by dress codes, code of ethics of the FFA, participation in not only FFA but other agriculture related camps as well as mixing in other organizations' camps. With all of the unrest and trouble because of excess leisure time we need to have persons that will be active in organizations that they believe in and are proud of. This will lend itself to a discussion solving process rather than a riotous situation. It does little good to criticize if no better solutions are made available.



Collegiate FFA Chapter members working with a demonstration plot that they co-sponsor.

### Evaluation

Evaluation is compulsory. Studying ones self, beliefs, job, livestock, crops, business, etc. is necessary.

We are constantly working with the FFA by judging, electing officers, appointing committees, setting up a program of work, and transacting business.

To separate the FFA from our instructional programming would be similar to taking the teeth from one of two gears. Things might work but they would be very erratic. By using these FFA activities we are encouraging the thought process. We seem to have forgotten how to consider and concentrate effectively.

Consider the officers parts from the FFA Meeting Opening Ceremony. All students should understand each officer's duties and responsibilities rather than just have the officer learn the words. Most of the meanings have already been discussed, but I would like to list a few topics that strike me as important from these officers' parts.

### Topics of Major Importance

- President
- Leadership
  - Willingness to change
  - Cooperation
  - Self Confident
- Vice-President
- Health
  - Knowledge
  - Attitude
  - Cooperation
- Secretary
- Cooperation
  - Record Keeping
  - Public Relations
  - Neat
- Treasurer
- Honest
  - Record Keeping
  - Budgeting
- Sentinel
- Public Relations
  - Neat
  - Alert
  - Cooperation
- Reporter
- Public Relations
  - Patriotism
  - Respect

(Concluded on page 229)



# NATIONAL FFA STUDY...PHASE II

## A Formula for Redesigning Chapter Programs



Richard F. Welton

A wide variety of criteria are employed when agricultural educators attempt to measure the effectiveness quotient of FFA chapter programs. Common denominators frequently used to determine this quotient usually include the number of members in a chapter and the percentage of vocational agriculture students who are FFA members. In other words, the larger the chapter and the higher the percentage of vocational agriculture students in FFA, the more successful a chapter program is considered to be. Additional information obtained from the National FFA Research Study sheds new light on these two common denominators as measuring instruments.

The National Study was undertaken in 1971 to explore the relationship between the extent of students' participation in FFA activities and selected characteristics of chapters. A measurable participation score was obtained from 1,848 FFA members in the co-operating chapters of this nationwide effort. The original study did not include an analysis of the relationship between degree of participation score and: 1) the number of members in a chapter; and 2) the percentage of vocational agriculture students who were

FFA members. Phase II of this national study investigated these relationships. An analysis of variance tests revealed statistically significant (.05 level of significance) differences in mean participation scores among the levels of chapter size and membership percentage.

### Chapter Size and Participation

An inverse relationship existed between the mean participation score of members in a chapter and chapter size. *As the number of chapter members increased, the mean participation score decreased.* This significant finding tends to support the view that member involvement can be increased by limiting chapter size and, when necessary, establishing more than one chapter in a vocational agriculture department. An arrangement of this kind would create a situation for more members to become involved in mini-chapter activities. A climate for reorganization of FFA chapters is being created each year as vocational agriculture course offerings are broadened and as the number of multiple teacher departments increases. With an increasing number of specialized programs such as agricultural mechanization and horticulture, there is also the additional need to initiate new chapters to satisfy specific needs of students enrolled in these programs. As the number of multiple teacher departments continues to increase each year, more teachers are becoming available to organize and ad-

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Southern Illinois University  
Carbondale

vised new chapters.

### Per Cent Membership and Participation

Usually we expect chapters with a high percentage of vocational agriculture students who are FFA members to also have members actively participating in various FFA activities. The data showed that a high membership percentage had little or no effect on mean participation score. Chapters with 100 per cent membership had a mean score of 12.4. On the other hand, those chapters with 40 to 59 per cent membership had the highest reported score of 17.1. These findings suggest that where chapters have closed the gap between membership and enrollment in FFA, increased member involvement in FFA activities did not automatically follow. *High membership percentage in a chapter is not necessarily a prerequisite for increased membership participation.* This does not mean to imply that efforts to bring more vocational agriculture students into the organization should be de-emphasized. We need to strengthen our efforts in this direction; however, we must also explore new methods and techniques of placing and keeping more of our members in the mainstream of FFA activities.

Teachers need to make use of these common denominators as they reorganize and redesign chapter programs which will reflect the dynamic changes that are occurring in agricultural education. ◆◆◆

### "NOT JUST TALK—BUT ACTION"—Johnson, from page 221

- Carry out a forest or grass fire prevention program.
- Plant trees for windbreaks.
- Install natural or artificial trees or flowers in business districts.
- Remove vandalized spray paint from buildings, signs, bridges, etc.
- Cut and remove grass and weeds from out-of-the-way places in villages, and public places.
- Screen off dumps and junk yards from public view.
- Conduct tours — show good and bad environmental spots in rural and urban areas.
- Promote and carry out community clean-up campaigns.
- Repair and paint-up rusty dilapidated mailboxes.
- Purchase and distribute free bird seed.
- Remember — do something — anything to HELP.

Lots of material is available. A lot is free. Send for some. Use some. Read some. Distribute some. There are many sources. An excellent one is:

Keep America Beautiful, Inc.  
99 Park Ave.  
New York, N.Y. 10016

They can provide materials on statistics, environmental equipment, photography, litter prevention, pollution control, community guides, junk car programs, instructors manuals, litterbag sources, bumper stickers, posters, decals, signs, buttons, patches, plus much more.

The environment belongs to everyone. It's yours and mine. Let's keep it clean, healthy, and beautiful — now and always. Do a little more. Work a little harder. Promote a little more. Maybe then — there will always be a little more of outdoor America for all of us.

Remember — we need "NOT JUST TALK — BUT ACTION." ◆◆◆

# FFA MEMBERS LEARN & EARN

George W. Matthews  
Vocational Agriculture Department  
Sussex County Vocational-Technical Center  
Georgetown, Delaware

Sussex Vocational-Technical F.F.A. Chapter works to promote soil and water conservation in the county.

F.F.A. Chapters, each school year, develop a chapter program of activities. The activities consist of 10 to 12 goals which are set to be developed by the chapter, working in a cooperative effort. These goals are based primarily on the needs of the members, school, and community.

This year the major project for the Sussex Vocational-Technical Chapter was the replanting of 50 acres of cut-off woodland. The planting of the pine seedlings was a cooperative effort on the part of the three agriculture areas at the Center: Farm Mechanics, Ornamental Horticulture, and Occupational Training in Ornamental Horticulture.

The area planted is located about two miles west of Milton on a tract of land owned by Mr. Charles D. Carey of Milton and Amherst, New Hamp-

shire.

The project was financed by the federal government and the local farmer. The pine seedlings used were grown and furnished by the tree nursery, Department of Agriculture, Lincoln, Delaware. These trees were planted at about the rate of 1,000 seedlings to the acre. Mr. John Swan is the service forester and state director for Sussex County.

The replanting of cut-off timber land is a way of conserving land. This prevents floods, and in the future timber can be harvested. This idea has been practiced in the south and other areas of the country, and is now being practiced in Delaware.

The following students worked on the cooperative tree planting project, also shown are the home schools they are from:

- Robert Leggins — Cape Henlopen
- Paul Dorman — Sussex Central
- John Lynch — Sussex Central

- Reese Elliott — Sussex Central
- Gary Moore — Seaford
- Eric Farmer — Sussex Central
- David Hall — Sussex Central
- Anthony Jones — Cape Henlopen
- Marvin Handy — Indian River
- David Predeoux — Indian River
- Marty Tankard — Indian River
- Carl Kellam — Laurel
- Gary Matthews — Indian River
- John Foskey — Sussex Central
- David Hovatter — Delmar
- Donald Bunting — Cape Henlopen
- Allen Hartman — Seaford
- Danny Moore — Woodbridge
- Eugene Barnes — Woodbridge

The agriculture teachers at the Center are Mr. George Drew, Agriculture Mechanics; Mr. Ernest Elsasser, Ornamental Horticulture; and Mr. George W. Matthews, Occupational Training in Ornamental Horticulture.

Helping to coordinate the project were Mr. Donald Arthur, Principal, and Mr. James C. Phillips, Superintendent, at the Sussex Vocational-Technical Center located in Georgetown, Delaware. ◆◆◆

(Erwin—from page 224)

features for Vo-Ag-FFA curriculum is the National and State FFA contests. These contests may be used for both generalized curriculum inputs as well as being specific course outlines for specialized Vo-Ag-FFA subject matter. Especially are the contests excellent bases for software for independent study under modular scheduling. Much remains, however, to be done in the realm of designing both contests and curriculum along lines of educational consideration including taxonomic terms and specific competencies. Gaps remain in covering all technology (such as feeds and feeding technology). But a splendid series of contests is available

in most states and an increasing number of events show strides in the needed direction.

But what about the student who does not choose to join FFA? If FFA is a valid portion of the curriculum, a most directive attitude and policy must be firmly established. If the student elects Vocational Agriculture it must be understood that the student is also electing to join FFA. Perhaps the school must allow a "course fee" to be paid for enrollment, the fee to include FFA dues. At the very least the FFA ad-

visor must establish a firm understanding that all are *expected* to join or, in writing, state firm and debatable reasons for electing to not join. The FFA chapter must design activity programs to allow the student to earn dues payments.

Perhaps this is the truest test of FFA integration into the curriculum — in using FFA *participation* as an element in grading. Note that achievement is not the keystone, but participation: (This is a portion of a 10-item self-scoring grade appraisal). ◆◆◆

A	B	C	D	E
I took part in most FFA in and out of school	I took part in most FFA in school	My activity was average with some FFA participation	I paid my dues but have yet to take part in FFA	My dues are not paid nor earned and I have not taken part in FFA

(COVER PHOTO—from page 218)

Minnesota FFA Officers are shown (center) portraying the 1973 FFA theme, "FFA Unites Youth With Opportunities." The 1972 theme, "Youth With A Purpose" is shown as a backdrop. (Photo by Ron Miller). FFA enjoys an excellent reputation for preparing youth to be involved in business meetings. This is Maryland's Championship Team from Gaithersburg High School (Photo from University of Maryland). (bottom left) Artist at the faucet is Princess Kay of the Milky Way XVIII. Mary Ann Glawe of Detroit Lakes, Minnesota. State FFA President, Steve Thal of Watertown is holding the

milkboard. (Photo from W. J. Kortessmak, Minnesota FFA Executive Secretary). Meeting VIPs get youth involved. State Directors of Vocational Education were guests of the National FFA Organization at their headquarters in Alexandria, Virginia, during a recent meeting of State Directors last spring. Among the 85 guests present were (left to right) Dennis Sargent of Bradford, Ohio, former National FFA Secretary; Byri R. Shoemaker, Ohio Director of Vocational Education, George L. Sandvig, Virginia Director of Vocational Education, and Kevin Hall, former National FFA Vice President of the North Atlantic Region from Keymar, Maryland. (Photo by Archie L. Hardy for the Future Farmers of America).

# FFA AND THE DISADVANTAGED STUDENT

Do you know a student who resembles this young man?

"My name is Eddie Martinez. I am 14 years old and I am a Chicano. I go to Central Valley High School where I am a freshman in Vocational Agriculture. My teacher, Mr. Ulrich, says I should join the Future Farmers of America. But I don't want to. My people are not farm owners in America! I only in this class because the counselor he tell me that I could not go to college and I needed to be in some class where I could learn something. My father is a tractor driver for the Lazy River Farms. We live seven months of the year in many migrant farm labor camps and five months in an old house that dad's boss lets us use out on the farm. The roof, it leaks real bad and five of the eight windows they are cracked or broken, but the house has a good wood stove it helps keep the place warm. I sleep with my 5 brothers. My two sisters, they sleep on the floor.

Mr. Ulrich says if I work real hard and make one thousand dollars and do some other thing in the FFA, I get to go to Kansas City. I would like that. I have never been anywhere besides my old home town in Mexico, cepting for our trips looking for work. But I can never earn one thousand dollars, that's as much as my dad make in four months. I guess I better forget the FFA. Mr. Ulrich says that the FFA has judging teams, and public speaking, and parliamentary procedure, but I could never compete with the Americano because my English, it is not so good. I had better drop this class. I will never be able to do anything any way. Ever since I let the irrigation ditch run over and break last summer, my dad says I will never be any good for anything."

Does the FFA have anything to offer

Larry Rathbun is on leave of absence as Assistant Professor of Agriculture Education at California Polytechnic Institute, San Luis Obispo.



**Some FFA Advisors will recall that the mainstream of the FFA in 1928 was composed of students similar to Eddie. Many of the early Future Farmer members lived in rural social isolation, with a heavy work obligation to the family and little if any opportunity for youth activities or leadership development.**

this young man? Should the Eddie Martinezes, other students of vocational agriculture who are disadvantaged because of their environment, be they black, brown or white skin, be encouraged to join the FFA? Each of our students is enrolled in vocational agriculture for a different reason, but most have a basic interest in agriculture or at least that particular area of agriculture as represented by their class; ie: floristry, small animal laboratory technician, welding, etc. However, most have not experienced a high degree of success within our school system.

There are some things which we as Vo-Ag teachers can do which will motivate these students, which will involve them in the FFA and provide them with an opportunity to share in the benefits of belonging to this youth group.

Since 1928, the FFA has been the vehicle by which innumerable rural and urban youth have been motivated to a high level of achievement in agriculture. However, in many FFA chapters, students of diverse socio-economic and cultural backgrounds have not been as extensively involved in the learning experiences afforded by that chapter as would be beneficial to their development and achievement. Some FFA Advisors will recall that the mainstream of the FFA in 1928 was composed of students similar to Eddie. Many of the early Future Farmer members were students who lived in rural social isolation with a heavy work obligation to the family and little if any opportunity for youth activities or leadership development. As the FFA and vocational agriculture has been more successful, it has been easy to counsel, advise and train the highly

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EPDA Graduate Fellow  
Ohio State University  
Columbus, Ohio

motivated middle and upper class students who come knocking on our classroom doors. Too often the disadvantaged student has suffered by involuntary exclusion from our programs.

Most of the present techniques and practices which we as teachers and advisors utilize daily in motivating students to become active in the FFA are directed at the basic needs of each individual student. If we examine the hierarchy of need as coalesced by Maslow (1943) and apply these needs to the disadvantaged student, we may note some rather wide gaps and voids in our present modes of operation.

Maslow stated that the first need of each individual is to care for his physiological needs; ie: air, water, food, clothing, shelter, etc. If we think in terms of the above student we notice some real areas of concern. If Eddie Martinez is to be stimulated by our class, and the FFA, he first must have his need for physiological comfort satisfied. What do you do to assist the student who comes from this type housing and home life to feel warm and comfortable in your classroom? Does the FFA recognize this difference in our students?

The second need of each person as identified by Maslow is for a feeling of safety and security. This goal of Eddie Martinez does not appear to be a real problem since his family is intact and both parents reside in the home. However, various research studies report that the disadvantaged student often has one or both parents missing from the home. Does the present FFA program provide for students with this type of disadvantage?

Once these two basic needs of each individual are fulfilled to the degree that they no longer monopolize his consciousness, he can begin giving attention to the third level of need which is for love and a sense of belonging. It is obvious that Eddie has mixed feelings about his sense of involvement in the Vo-Ag class. Although his father apparently lacks confidence in him,

(Continued on next page)

(Rathbun—from page 228)

Eddie expresses no outward hostility for the other members of his family. We might assume that his home life is fulfilling a certain degree of his need for love and involvement. What is his school life contributing to this function? What do we as teachers do for the student who is receiving no love or sense of belonging at home?

If a student can reach the level of human growth at which he is not prepossessed by an over-riding concern for one of these first three areas of need, then he can direct his attention to the area of human concern at which most of our current FFA activities, programs and awards are directed: the need for self esteem. Can our present FFA awards and incentives satisfy to stimulate the students with special needs? Can the FFA reach these students and involve them in its learning opportunities?

Our National Advisor, H. N. Hunsicker has stated:

**"If we truly believe that FFA is an integral part of instruction in vocational agriculture, then every student must be a member of the FFA. If every student is a member, then it is the responsibility of the organization to provide something for each student — but not necessarily everything for every student."**

What can the FFA offer to each student member? Various research studies indicate that the disadvantaged stu-

(FFA: A CAREER EDUCATION CARRY-OUT TOOL—Sonne from page 225)

If we would use all of these topics as primary goals for study and development by each student we would have understanding student bodies in our schools. At the same time we would have very proficient individuals graduating into society. If employers could find prospective employees proficient in all areas listed they would not hesitate to hire them.

By the same token the FFA Creed is also a fine teaching tool.

Before I mentioned you as the pilot. Maybe you feel you are in a pilot program and you are the one that works very hard up to a point and then you loose your cool, so to speak. Or are you the one that says it does not matter because you have a good parachute and you can just eject and it is all over. Most Vocational Agriculture Instructors are of the belief that if I am the pilot this is my plane, if it goes down

**The disadvantaged student does not have an opportunity for success within our present awards and incentives programs.**

dent does desire to participate in the social and academic leadership activities of the FFA. Additional observations would indicate that the majority of disadvantaged students are motivated by familiar, yet different, stimuli as the regular FFA member. When asked what they would like as rewards for their achievements, disadvantaged students often respond with (a) money, (b) travel or trips, (c) personal trophies with "glitter," and (d) peer group recognition. These are not too much different from the responses which we receive from the regular vo-ag student.

Does the disadvantaged student really have an opportunity for success within our present awards and incentives programs? I propose that he does not. I propose that even our awarding of a National Foundation Award Medal to the best student in each of the seventeen categories represented by the foundation award system, does not truly provide a realistic opportunity for success and recognition to the disadvantaged student. I do not mean to downgrade or slight the wonderful support which the National Foundation has provided our organization for

so many years, but I do think that the time has arrived for us to seriously consider whether there might be some modifications which we can make in the present processes and procedures of the FFA Awards and Incentives Program which will stimulate all of our students to their maximum level of achievement.

Today's current interest in educational performance objectives offers a real opportunity for consideration of a FFA Award based upon the students performance within a given class and his performance as compared with the stated outcomes and objectives of that class rather than an award that is based solely upon peer group competition. If we had an award that each student could achieve based upon certain performance levels in the class, the laboratory or shop, and involvement in the FFA, then each student would know that at the end of a particular class, he would receive recognition for his achievements in this class.

A group of teachers in thirteen schools located in California and Ohio will be evaluating the merits of such an award concept during the 1972-73 school year. Concerned FFA advisors everywhere are waiting the results of their efforts.

It is hoped that this pilot program will result in the optimum involvement of disadvantaged students in the FFA.

Maslow, A. H. 1943, "A Theory of Human Motivation" Psychological Review, 50:370,396.

they came to your classes you would not be needed.

It is easy to be disenchanted, but give that extra 10 per cent of yourself and of the program and possibly you will be left in an affirmative disbelief. It is much easier if you use the FFA as a teaching tool. Can a pilot really fly without a plane? Make sure your evaluation is being made correctly. Are you looking at just a small sample of students? Are you following up former students to see their success? Do not be displeased with yourself, your students or your program until everything has had a chance to piece together and really work effectively.

Now take that plane (student), fill it with fuel (Agriculture Curriculum and FFA Work), being careful not to overfill, follow all preliminary procedures (teach expertly and enthusiastically) and proceed to put the plane into flight (occupation entry). ♦♦♦



# RESEARCH IN AGRICULTURAL EDUCATION

## —Studies Completed in 1971-72

James T. Horner  
University of Nebraska



James T. Horner

The 175 research studies completed in 1972 (although 39 less than reported the previous year) provide evidence that agricultural educators are still striving to meet the challenge of change through the investigation of significant problems. Intelligent application of pertinent research is one of the most important ways to bring about improvements in agricultural education.

Abstracts of studies were compiled by the Research Committee of the Agricultural Education Division of American Vocational Association. A limited number of copies of the studies reported in 1971-72 may be obtained from: C. M. Curtis, Louisiana State University, Southern Region; H. B. Thomas, University of Illinois, Central Region; E. M. Juergenson, University of California, Pacific Region; and Philip Edgecomb, Rutgers, New Jersey, North Atlantic Region.

The abstracts briefly state the purpose, method and findings and include information on where to obtain the thesis or published report. Doctoral theses may be purchased on microfilm; master's theses are available through inter-library loan; and staff study reports may be requested from the respective institutions.

In classifying the titles reported in 1971-72, thirteen major categories were utilized. Again this year, the largest number of studies dealt with programs for high school students. Adult and continuing education, evaluation, employment opportunities and teacher ed-

*This compilation of titles of research in agricultural education completed in 1971-72 is a project of the Research Committee of the Agricultural Education Division, American Vocational Association. James T. Horner, Professor and Chairman of Agricultural Education at the University of Nebraska, served as Chairman of the Research Committee.*

ucation followed in popularity. Guidance and counseling and curriculum received considerable emphasis as well. A number of studies dealing with learning-teaching methods and other educational programs, such as leadership, agricultural mechanics and horticulture were reported. Other areas receiving considerable attention included administration and supervision, agricultural education in other countries and programs for students with special needs.

Forty-two per cent of the studies reported were master's degree theses, papers, practicums or problems; 35 per cent were doctoral dissertations; the remaining 23 per cent were staff studies.

### ADMINISTRATION AND SUPERVISION

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# A NATIONAL LEADER

## In Formative Years of Vocational Education

# RAY FIFE



Ray Fife

Dr. Ray Fife was one of our national leaders in the formative years of vocational education. He started his career in 1920 and along with another pioneer, Dr. Wilbur F. Stewart, developed a program of vocational agriculture in Ohio that was well received then and is viewed now as a monumental achievement. In 1932-33 when vocational education had a struggle for its existence, Dr. Fife was chosen to be President of the A.V.A. In recognition of his accomplishments, and in consideration of the difficulties ahead, he was reelected President of the A.V.A. for 1933-34.

During the 30's we were confronted with an economic depression. Programs depending on public monies for survival had to receive an articulate approval by citizens before funds were made available. Generally the legislators were requested to reduce governmental spending. It was at this time that Fife through his uncanny capacity as a leader, mobilized forces in each state so its citizens were made aware of the need for vocational education and also the need for continued financial support on national, state and local levels. The aroused public through direct contacts, letters and telegrams made their feelings regarding vocational education known. The fact that federal appropriations were not withdrawn and that the George-Elly Act of 1934, the George Dean Act of 1936, and subsequent legislation favorable to vocational education was passed, revealed the effectiveness of their efforts.

It also pointed to the accomplishments of those giving leadership to promoting vocational education. Here the contribution of Fife is in the limelight and provides clues to the competencies possessed by this man. He could analyze problems, arrive at acceptable procedures, and then could secure the resources to get the task accomplished.

Ray Fife was reared on a farm in Northwestern Ohio. He graduated from The Ohio State University, College of Agriculture in 1915. He did some graduate work at Cornell and received his Ph.D. from Columbia in 1931. Following his Bachelor's program he had experience in high school teaching, school administration and Agricultural Extension at the county level. Later, he was the Assistant State Leader of the 4-H Clubs in Ohio. In 1920 he was appointed teacher educator at The Ohio State University and one year later became the Supervisor of Vocational Agriculture in Ohio. He continued in the work until 1936 when he accepted the position as President of New Mexico State University. In 1938 he returned to the Department of Agricultural Education at The Ohio State University to head up the program of research and to assist in graduate education. He continued in this capacity until his death in 1950.

Dr. Fife was highly regarded as an administrator and teacher. He provided leadership in developing the program of vocational agriculture in Ohio. With Fife there was no compromise on the purposes of the program as defined by the Smith Hughes Law of 1917. Complete programs were to be conducted by teachers of vocational agriculture. This included a high school curriculum in keeping with the needs of the students enrolled and the agricultural endeavor they would likely pursue. In this curriculum attention was given to plant science, animal science, soils, farm

management, and farm mechanics including agricultural engineering. Occupational experience, primarily farming projects, was a necessary part of the programs. Livestock and crop projects were to have scope and sufficient returns to lead students to establishment in farming. They were to show evidence of professional planning and be worthy of teacher time and effort. It was expected that such programs were fortified with accurate records so that they would be instruments for improving practices in a successful management of a farming business.

From the very beginning of the program of vocational agriculture, and Fife could be identified with that start, an organization for vocational students in every department was encouraged. When the FFA was given national recognition in 1928, Ohio was among the states promoting this added dimension in developing agricultural leadership. Dr. Fife was one of the most enthusiastic promoters of the FFA. In fact, for years in Ohio he was Mr. FFA.

The high school program was given importance but no vocational program in Ohio was complete without adult education. Dr. Fife was an ardent be-



Willard H. Wolf



Ralph E. Bender

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(Wolf & Bender—from page 233)

liever in working with out of school youth and adults. The work of Bruce and others with young farmers caused Fife to study diligently the causes for success and failure of young farmer programs. In this field he was an authority and did considerable writing. While he was State Supervisor, more than two-thirds of the departments had programs for young farmers and practically all of them were organized as a Young Farmers Association. In 1938-39 the enrollment of such students was 4,935. At that time a young farmer was not enrolled unless he attended three or more meetings.

Even though young farmer programs were promoted, so too were programs for adults. Dr. Fife gave leadership to innovative ideas in adult work such as the employment of special instructors for courses in farm machinery, power, and farm management, supplemental pay to teachers for adult work, special methods in teaching, and using adult class members for planning and conducting programs.

Dr. Fife was always concerned in overall community reaction to local programs. Teachers were responsible for agricultural education in their school districts beyond the classroom. They were to prepare news releases for local papers, conduct radio programs, respond to inquiries for agricultural assistance, participate in wholesome community activities and be the profes-

sional in advising both the young and the mature in the affairs of farming. Their job was to conduct a 12 month program of agricultural education. They were protected by agreements with boards of education and school administrators to devote fulltime to vocational agriculture. They did not have teaching assignments such as biology to dilute their energies for which the program was intended and needed. This was a fulltime assignment for vocational agriculture or else the community did not need this program. With the increasing demand for such programs and a limitation of state and federal funds, schools that were unwilling to meet standards were dropped and support given to schools where it would do the most good.

Dr. Fife had much to do about the development of standards in vocational agriculture. At the annual meeting of the AVA in St. Louis in 1938 he presented a paper on "National Standards for Vocational Agriculture" and L. R. Humphreys of Utah presented one on "Evaluating the Efficiency of a Department." "Although standards for vocational agriculture had been discussed from time to time, the discussion at St. Louis may be considered as the beginning of a movement to arrive at standards for teaching vocational agriculture." This statement was included in the Vocational Division Bulletin No. 240 entitled *An Evaluation of Local Programs of Vocational Education in*

*Agriculture* published by the U.S. Office of Education in 1949. The bulletin was a summary of a nationwide evaluation program that was spear-headed by a national committee appointed by the U.S. Commissioner of Education, John W. Studebaker. Fife was a member of this committee responsible for planning and conducting the program of evaluation of local departments of vocational agriculture that included a representative sampling of departments from almost all of the states. Evaluations were made in such a way that programs were described on the basis of provisions and conditions that were present and functioning in the departments, ranging from very inferior to very superior. This was one of the most extensive evaluation programs that vocational agriculture has yet experienced.

The close relationship that Fife had with teachers and school administrators made his supervisory responsibilities less arduous. He knew how to work with people and to have them help promote and conduct the Ohio program of vocational agriculture. It has been said that "Dr. Ray Fife was born an administrator," that "he instinctively did the right thing at the right time." Along with this man's remarkable qualities as a leader in vocational education, he was considerate, tactful, and always available for counsel. He was entirely professional. He was a man, like each of us aspire to be. ♦♦♦

R. J. Agan, Coordinator  
Vocational Education  
Sam Houston State University  
Huntsville, Texas



R. J. Agan

When you have had one of those rough days, imagine for a moment that you are tomorrow going to be teaching vocational agriculture in Zulia, Colombia, South America, where an agency of the government of Colombia, called INCORA, has cleared away jungle lands in the wilderness near the Venezuelan border, arranged villages, farm tracts, credit, cooperatives, and asked a technical institute of agriculture with its staff of teachers of vocational agriculture to train present and prospective farmers for proficiency and success in this newly settled area. These farmers and their sons brought in by the government of Colombia to settle the land are not necessarily farmers by choice, and as such present problems of teaching the affective (attitude, pride, etc. in farming) as well as the problems of teaching the cognitive (knowledge) and the psycho-motor skills required.

Preparation for leadership is more difficult in the Colombian resettlement situation where irrigation systems, cooperatives, credit systems, etc., have been organized by an agency of the government rather than by the people themselves out of a felt need.

A similar challenge exists in Northeast Brazil where an agency of the government called GERAN is in the planning stage for a complete program

## CHALLENGES IN FRONTIER LAND

Of all the regions of the world, the one most ready to receive help in vocational agriculture, is Latin America.

in agricultural education for more than 10,000 peasant families who will be idle and unemployed due to a move to mechanize the sugar cane agriculture of the area. Through land reform, undeveloped space will be provided for these people in the form of virgin, marginal, jungle lands where the machete-ability-level peasant and his family will need to be educated into successful, thinking and proficient farmers who can work with their neighbors for more effectiveness through cooperative programs of agriculture, and make a satisfactory living from lands and situations not friendly to their presence there.

In the South of Paraguay, the agricultural school at San Juan Bautista is asking for Peace Corps Volunteer teachers of vocational agriculture to help the Paraguayan Ministry of Agriculture in their program of preparing young men to convert the virgin jungle lands of Paraguay into productive agricultural regions.

There are many opportunities where the expertise and know-how of experienced teachers of vocational agriculture from the United States would be of assistance to Latin American vocational agriculture at all levels. ♦♦♦

For many, the greatest barrier to assisting in the development of vocational agriculture in Latin America is the necessity of learning their language, which must be done well by the one who wishes to be of service. This may be a native Indian dialect in addition to Spanish or Portuguese. Not only is it necessary to know the spoken and written language of the people to be served, but to also know their culture — customs, habits, methods, ways of thinking, etc. Any successful program of vocational agriculture must fit into the culture of the people being served. The highly successful program of vocational agriculture of Crossroads, U.S.A., might very well be a complete failure in the conditions which exist at Crucero, Latin America.

Each of us in the United States have hungry next door neighbors. We could invite them to eat three meals per day at our table or even send the meals over to their house, and we would still have enough to eat at home. However, we really have not done this hungry next door neighbor of ours a great service by either of the above methods, beyond keeping them from starvation. We only do them a great favor and service when we teach them how to grow and prepare with pride their own adequate supply of food. The same idea was expressed in the saying, "If you give a man a fish, he will eat once. If you teach him to fish, he will eat for the rest of his life." This is the speciality of we who teach vocational agriculture. ♦♦♦

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### From the Book Review Editors Desk...

If you find one of these book titles interesting, send the Book Review Editor a card and he will send you a book to review. The book will be yours to keep. The address is: James P. Key, Agricultural Education Department, Oklahoma State University, Stillwater, Oklahoma 74074.

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By Louis M. Thompson and Frederick R. Troeh  
McGraw Hill Book Company

**OPERATION RHINO**  
By John Gordon Davis  
Doubleday & Company

**A SELECTED LIST OF EDUCATIONAL MATERIAL AVAILABLE FROM COMMERCE AND INDUSTRY**  
By John F. Deasy  
New York State College of Agriculture and Life Sciences

**PLANT GROWTH SUBSTANCES IN AGRICULTURE**  
By Robert J. Weaver  
W. H. Freeman and Company

**LAND SPECULATION — AN EVALUATION AND ANALYSIS**  
By Harold Oppenheimer  
Interstate Printers & Publishers

**SUGAR BEET NUTRITION**  
By A. P. Draycott  
Halsted Press — A Division of John Wiley & Sons

**FUNDAMENTALS OF BIOMETRY**  
By L. N. Balaam  
Halsted Press — A Division of John Wiley & Sons



# DON'T MAKE A SLIDE PRESENTATION

"I have a few slides here that I thought I'd show you," began the speaker, and with that unhappy introduction his program started downhill. The audience, concealed by darkness, prepared to settle down for a long winter's nap. There is nothing new and exciting about colored slides; and if the speaker was expecting his announcement to rouse enthusiasm, he was in for a disappointment. The speaker lost his audience when he admitted he was there to show slides. Yet an informative talk, supplemented by colorful slides, can be very effective if proper technique is used.

The following horrible example of a slide presentation, as are all others in this article, is true. It illustrates many mistakes commonly made in using slides.

Announcing she had some slides to show, the lady uncased a projector, placed it on a table, pointed it at a light-blue colored wall, located an electrical outlet, loaded the rotary slide tray and began. She introduced each slide with the same phrase: "This is a picture of . . ." One slide showed a cluster of tombstones, a few bunches of tired flowers, and an iron fence. Said the lady brightly, "This is a picture of a cemetery." She then proceeded to the next slide without further comment.

Placed in the machine at random, the slides presented no logical sequence. Frequently the lady was unable to identify a scene, many slides were blurred or improperly exposed, and one slide was completely blank. Slides that appeared on the screen sideways didn't concern the lady; however, when the first upside-down picture appeared, she picked up the projector and inverted it. Unfortunately, about a dozen slides fell out of the tray, stalling the performance and requiring the lights to be turned on.

Word of mouth is one of the most effective methods of disseminating information. A speech supplemented by carefully chosen slides can be very effective in informing or motivating an audience. Improper technique in using slides robs your presentation of its

An informative talk, supplemented by colorful slides can be very effective if proper technique is used.

effectiveness.

Audience attention is high when a speaker first is introduced. Any delay in starting allows attention to drift. If slides are to be used, the projector should previously be set up, focused, and someone designated to dim the lights at the proper time. It is important to let the audience know that your intention is to tell a story rather than show colored pictures.

Speakers who refer to the slides or talk to the screen are shifting the attention of the audience. Avoid such phrases as "Now here we have . . .", "This is a picture of . . .", or "This slide shows . . ." Seldom, if ever, refer to the screen. Flashlights with arrows, telescoping pointers and such gadgets give the impression that you are showing pictures rather than telling your story.

While a fade-in type projector such as the Kodak "Pro-Gramo D-C 100" unit costs more than the standard projector, the blackness between slides is eliminated and makes the presentation flow more smoothly. Whatever equipment you choose, it should perform without flaw if you expect to hold the attention of the audience. Should a malfunction occur, however, don't sabotage the program in order to correct the error. Consider the effect achieved in the following account of the presentation of an award to a beloved retiring member of a professional association:

The awards committee had commissioned an artist to prepare a caricature drawing of the retiree. This drawing was photographed, placed on a slide, and was to be shown on a screen lo-

There is no excuse for using poor slides. Don't apologize — just don't use the slide.

Harold W. Sullivan  
Program Specialist in Vocational Agriculture  
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cated just beside the podium. The one slide was put in the projector backward and the caption, in Old English Script, was unreadable. Leaving the projector lamp on, the projectionist set about trying to advance the rotary tray to a position where the slide could be removed and reversed. As he manipulated the tray, the projector light kept flashing in the face of the retiree, who was trying to acknowledge his award in a serious manner. The man asked the projectionist to desist, but reinforced by three other helpful souls who rushed forth to assist, the operator continued clicking and flashing. In the midst of the turmoil the award recipient, rather annoyed, concluded his remarks and sat down.

By all means, preview slides before you use them. Make sure that you have not incorporated any of the small things that promote audience irritation: blurred slides, pictures that do not fill the screen or splash over the edges, black and white slides mixed with colored, inverted or reversed slides, or photographs that do not show anything of importance. There is no excuse for using poor slides. Don't apologize—just don't use the slide.

Using a remote control switch to advance the slides is better than trying to cue someone operating the projector. With the remote control you can change slides at any point in your presentation rather than just at the end of a paragraph. Vary the points where slides are advanced in order to avoid creating the impression that the slides are serving as punctuation marks. It goes without saying, of course, that the speaker must know how to operate a remote control switch. In a large meeting sponsored by an electrical power company, this incident happened:

A sweet little old lady was on the program to tell the group how remodeling her home to an all-electric facility had been accomplished and the merits of such an endeavor. She had brought some slides her husband had taken of the abode, which she handed to the  
(Concluded on next page)

Leonard J. DeBoer  
Vocational Agriculture Instructor  
Chamberlain, South Dakota



Leonard J. DeBoer

For years, I as well as other Vo-Ag. Instructors, have worked up articles and reports and sent in forms on Safe Corn Harvest and Safe Tractor Use, etc. Now, in this changing world, I think it is time we adjust to include a bit of study and talk in our classrooms about recreational safety. To be specific, I mean the snowmobile which may come under a variety of names and speeds and horsepower.

Recreation is a needed part of one's life, but it must be done in a safe and sane manner. This is where the Vo-Ag instructor can fit in—to instruct or inform the people of his areas about some of the hazards of this new boon in recreation.

The following three recent events have brought this vividly to mind. During Christmas vacation, the dad of a local Ag. boy took his first and only solo ride on a snowmobile. He did quite well at first and attained an estimated speed of 55 mph before he realized he was at the creek crossing.

(Sullivan—from page 236)

and because this type material is not designed for this communication media. You should be telling the story, not showing it. If it is important for the viewers to see this printed material, pass it out at the end of the presentation. Slides shown should relate directly to the subject. Admittedly, there are some exceptions to this rule, but such was not the case when the owner of a company was put on a program to explain the method his company used in insulating mobile homes. After a few halting, introductory remarks, the gentleman proceeded, with obvious relief, to "some slides he had to show." The first five slides showed, from various angles, the new company truck. Slide six was a group of workmen standing beside the truck. Slide seven was a close-up of slide six. Slides eight

Charts, graphs, and itemized lists fail miserably as suitable material for slides, partially because the writing is usually too small for everyone to read

# NEEDED --- Recreational Safety Information

He didn't make the crossing successfully. Somewhere in the mishap he suffered severe leg and back injuries. Two weeks later, he was able to walk a bit, but couldn't be up and around for more than fifteen minutes at a time. It's rather difficult for a farmer to get his winter work done in fifteen minute bursts.

Another incident happened the other night to a younger sister of a former Ag. student. This seventh grade girl got her scarf tangled in the drive belts. In less time than it takes to tell about it, she was being choked and bruised. In the initial jerk, her head bent the handle bars. That sort of eliminated the immediate pain. Luckily, this accident occurred in the farm yard. Her companions rushed to the house and informed her parents that "Jeanie can't breathe."

She was lucky to be so close to needed adult help. She suffered a severely bruised head, neck burns from the scarf, and was badly frightened.

A recent phone call concerning the older brother of still another former Ag. student brought tragic news. The young man, after adjusting the snowmobile, had decided to take it out for a test run. Darkness had set in, but after a brief run on the area laid out

and because this type material is not designed for this communication media. You should be telling the story, not showing it. If it is important for the viewers to see this printed material, pass it out at the end of the presentation. Slides shown should relate directly to the subject. Admittedly, there are some exceptions to this rule, but such was not the case when the owner of a company was put on a program to explain the method his company used in insulating mobile homes. After a few halting, introductory remarks, the gentleman proceeded, with obvious relief, to "some slides he had to show." The first five slides showed, from various angles, the new company truck. Slide six was a group of workmen standing beside the truck. Slide seven was a close-up of slide six. Slides eight

to twelve actually did show something about insulation, with the truck in the background of only two of them. Slides 13 to 25 showed exteriors of mobile homes his company had manufactured but with nothing to indicate the homes had floors, let alone insulation. Allow a slide to be on the screen a maximum of ten seconds. If you have not finished your narrative by that time you should have used a second or third slide on the subject. Ideally, a slide would be exposed only long enough for it to be seen clearly, not examined minutely. Before you decide to use slides, remember that you were put on the program to tell a story. If slides expedite telling that story you will be wise to use them. You're on safe ground if you give an illustrated talk . . . but not if you give a slide presentation. ◆◆◆

for the use of such machines, he struck off cross country. Reports are that he was doing 70 mph when he hit a tree with his head. His funeral was held here in a local church.

All three of those accidents could easily have been prevented. I'm not condemning these recreational opportunities, but I think a bit of caution needs to be passed out. The two that happened locally survived, but either or both could have been fatal accidents. As it is, they suffered needless pain and agony.

I realize that from our standpoint the aggravating part is that there is no way to measure accomplishments done in preventing accidents and similar mishaps. We can't record the positive results, only mark down the failure in getting the message across that this new toy is something that must be operated by trained and skilled operators using some old-fashioned horse sense.

Think about local accidents or close calls, discuss them with the boys and girls, and work with any other media that you have for contacting your area patrons. One doesn't have to be a snowmobile expert to figure out some cautions and warnings. ◆◆◆

# LEARNING BY DOING BENEFITS EVERYONE

James L. Collins  
Teacher of Agriculture  
Monument Mountain Regional High School  
Great Barrington, Massachusetts



James L. Collins

Plans for developing fifty acres of land at the rear of our school originated from a desire to make good use of available resources for laboratory use in agribusiness and natural resources.

We have a greater demand by students each year for experiences in natural resources, family forest development and the common desire of most young people to gain whatever knowledge they can in the interplay of our ecological systems.

A work study program for the summer was developed. Access roads, foot trails, and a logging road were the basic improvements to be established the first year. Any hardwood trees that had to be cut when opening up roadways were used for firewood. Plans for the erection of a log shelter, fourteen feet by sixteen feet, to protect maps of the area were also included.

## Work Study Program

Six students from agribusiness and natural resources were selected to work during July and August. The agriculture instructors each worked one month. We worked three days each week on the project, and the instructors had two days to make placement calls and visit prospective students.

## Trail and Shelter Construction

Twenty six hundred feet of foot trails were cleared and marked with

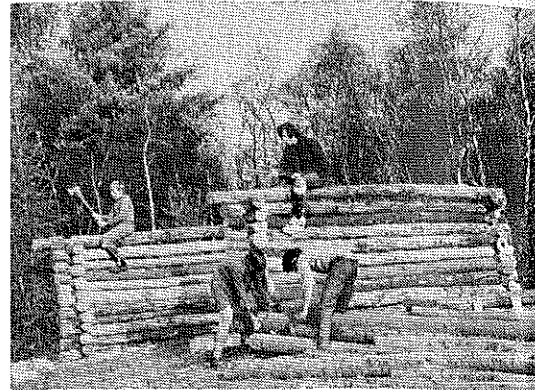
white paint on trees. One access road was developed from a hard top road by the Kenneth W. Milligan Plant Science Center (another work study project) back to the site of the log shelter. Work on the shelter, started late in August, was carried over into a regular classtime activity in the fall semester under the guidance of instructor Gary Johnston. All of the students involved gained new skills in using hand and power tools and a valuable experience in working together.

The school tractor provided the power for skidding full length logs to the work site. The logs were debarked with draw shaves and axes. Each student drove the tractor and helped to prepare the logs for skidding. Hard hats, shearing leg-guards, and plastic safety goggles were in constant use depending on the job on which the student was working.

## Cooperating Agencies

The County Forester and Soil Conservation Service Agent worked closely with us on the plans and will continue to aid us in recommending further work such as blasting out pot holes for ducks near a brook at the far edge of the swamp on the property line, locating a site for a nursery, and a small arboretum selected for our climate. The entire Nature Center area is bordered by wooded slopes and extensive swamp land.

The Nature Center is a feeding spot for a herd of five or six deer, and some forest management is slanted toward this game animal. Cottontail



Students erecting the log shelter to protect maps of the area.

rabbits and varying hares are also numerous. Bird life is extensive, including ruffed grouse and native woodcock. One half of the high dry ground was formerly pastureland and is regrowing to white pine, thornapple, barberry, birch, some alder and a few red oaks.

Timber stand improvement practices are being carried on by several students enrolled in agribusiness and natural resources, in the area between the athletic fields on the high ground and the swampland areas. This plot is approximately twenty acres in size and extends across the property. Tree species here are mostly white pine, black cherry, birch and maple. Hemlock and larch are predominant in the semi-swampland area and some elm and swamp maples are found throughout the wet areas. This entire area is providing hands-on experiences with chain saws, pruning saws and axes along with some tractor work. ♦♦♦

teachers, counselors, industrial arts teachers, administrators, etc., may be able to have a major portion of the cost of the tour as an income tax deduction. All educators are welcome to participate.

For further information about this 21-day escorted tour, please write to Dr. Bill J. Frye, College of Education, The University of Akron, Akron, Ohio 44304.

The educational emphasis of the tour will be on visiting local vocational and technical education facilities in each of the cities visited. In addition; city tours and free time for independent adventures will be provided.

Tour participants may earn five quarter hours of undergraduate or graduate credit. Participants who are employed in the field of occupational education as vocational or technical

## OCCUPATIONAL STUDY TOUR

The University of Akron is presently planning the third annual occupational education study tour. Included in the 21-day tour will be London, Amsterdam, Copenhagen, Berlin, Prague, and Vienna. The tour is scheduled to leave New York June 26, 1973, and return July 17.

## BOOK REVIEWS

LOOKING FORWARD TO A CAREER-AGRICULTURE. Swanson, Harold B. Minneapolis: Dillon Press, 1971. 120 pages; Price unknown.

There are nine chapters in the book, each of which is used to portray the scope of agribusiness and the diversity of careers therein. Attention is devoted to establishing the importance of agriculture and its interdependence with industry.

Included are career descriptions and contributions made by agricultural occupations in farming, ranching, communications, science, education, business, government, and foreign service. The author was careful to point out the importance of educational preparation for agricultural careers. Especially notable was his reference to the dignity of work at all levels of employment. Opportunities were described for career education ranging from the junior high school to advanced degrees.

Professor Harold B. Swanson is well qualified to prepare this book about careers in agriculture by virtue of his educational background and professional experiences. He is the head of the Department of Information and Agricultural Journalism at the University of Minnesota in St. Paul. He received his bachelor's degree in journalism from the University of Minnesota and a doctor of education in adult education from the University of Wisconsin. It is fitting that the talents of this noted agricultural communicator be applied toward orienting youth to promising careers in agriculture.

This book is one of a series written for junior high and high school students. It is simply written for ease of understanding, interestingly illustrated and presented in large print for easy reading. The author has effectively woven into context a surprisingly large amount of factual information and has portrayed agri-business in a dynamic challenging manner. *Looking Forward to a Career — Agriculture* would make a worthy contribution to junior high school career education or vocational guidance programs when used as supplementary reading material. Other selections from this series might also provide a valuable resource to aid students in career planning.

Vanik S. Eaddy  
Auburn University

FARM AND GARDEN SUPPLIES, by Lawrence A. Walsh, Robert D. Joy, and Norman K. Hoover. New York: McGraw-Hill, 1971, 140 pp.

The combination of product knowledge and merchandising skills results in a very functional manual for two areas of vocational education—agriculture and marketing—or for an agri-business activity. The authors have referred to the Manual's structure as an "instructional strategy" and rightly so. Intrigue is indicated when the students' interest is sought and sustained by the first chapter's general coverage of career opportunities to be found in agricultural supply businesses. A brief description of the basis for the transition from an agrarian economy to a service economy is also included in this introductory chapter, preparing the student with a career in agriculture

for the place he must expect to take in the latter.

Interest is further sustained in the next chapters which are concerned with merchandise information or product knowledge in several rather broad areas: Feed and Animal Nutrition; Seeds; Plants, Shrubs and Trees; Fertilizers: What They Are; Fertilizers: How to Use and Choose; Pesticides; and Petroleum Products. The introductory paragraph in each of these seven chapters justifies the importance of being informed on these specific items. The authors then offer product knowledge in a brief, simple and organized style, indicating that the salesperson must be able to provide information which assures the customer of a knowledge of agriculture technology. Activities are suggested for the development of performance skills that might be required for the marketing of any one of these groups of farm and garden supplies.

The final chapter covers (too briefly, probably) the services that identify a business as one which maintains a customer patronage over a period of a lifetime. However, the content does include many aids for the student to enrich his relationships with the customer while merchandising those items which were presented in the previous seven chapters.

The authors compose an excellent team for writing such a manual. One is outstanding in curricula writing and editing; one is an authority in agriculture education; and the other is known for his expertise in merchandising.

Mrs. Etta Dorn  
State Supervisor  
Distributive Education  
State of South Carolina

THE SCIENCE OF MEAT AND MEAT PRODUCTS. Edited by: J. F. Price and B. S. Schweigert. Second Edition, 1971. X + 660 pages, 130 Illustrations, 95 Tables, \$17.50.

The book *The Science of Meat and Meat Products* is again on the literary market in its second edition. The material in the text was written entirely by the Research Staff of the American Meat Institute Foundation. The collected material is divided into two subject areas: (1) the basic science of meat, and (2) the applied application of meat science to the processing and preservation of meat and meat products.

The text is well introduced by an introduction which provides an enjoyable narrative of the early history of the development of meat products. It discusses products which can no longer be found but in the annals of history. The introduction concludes with a description of the current trends in the meat industry. It is a text which can provide an informative background for those working in or with the meat industry.

Each chapter of the book is written by a different author or authors. Protein chemistry, microscopic structure, chemical elements of meat, post and anti-mortem changes, principles of muscle contraction, flavor constituents, quality control, and sanitation are the basic areas of subject concentration.

The book can be recommended for a diverse reading audience. It could be a learning tool to a Jr. or Sr. college student who possessed some previous background in microbiology and biochemistry. For graduate students in food science, animal science or the dietetic field the *Science of Meat*

and Meat Products could provide an excellent classroom text or a course reference book. Course instructors may also find it a good lecture reference source. Another group that may find the book beneficial would be personnel training programs such as food management companies, the meat industry, or government agencies. The 95 tables, pictures, charts, and graphs create picturesque visual learning for any student.

Donald L. Ahrens  
Southern Illinois University  
Carbondale

HANDBOOK OF LIVESTOCK EQUIPMENT by Elwood M. Juergenson. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1971, 266 pp., \$7.25.

Today a great deal of science is involved in the decision-making concerning livestock production. Large amounts of equipment are employed to put one's decision into use in agri-business. As science is rapidly moving forward, equipment and labor-saving devices must also be devised to assist in livestock management and to put into use the decisions of management more efficiently and rapidly.

The aim of this book is to bring together much of the information known about equipment and facilities that have to do with efficient livestock production.

The contents of this book cover a wide range of material from selecting a permanent living location to the simple conversion of ounces to grams. Here is a brief review of some of the highlights of the book. In the location of a permanent living location or a headquarters for a ranch, Dr. Juergenson points out important points such as accessibility to a paved road, mail route, power lines, and telephone. Also, water supply, types of soil for lawn and garden, and the view. He has helped illustrate these points with drawings and information tables.

Dr. Juergenson then moves into feeding and watering equipment, fences, gates, chutes, and corrals with drawings and diagrams of various forms of each. Helpful hints are also found concerning the drawings.

He then covers various loading, transportings, and restraining equipment which have proven satisfactory. These suggestions are accompanied by scaled drawings and diagrams.

Next, he covers various individual equipment for horses, cattle, sheep, and swine, illustrating individual equipment that is pertinent to each species.

Equipment for shows, exhibitions, and hand tools to care for livestock are covered next. Most of this equipment can be made out of material already on hand.

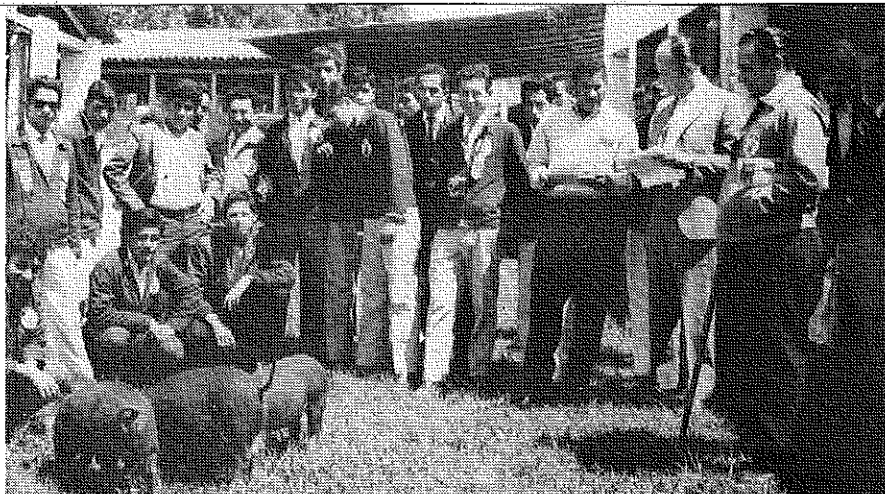
The last chapter is a very useful glossary of standards and measurements. It has readily accessible tables and conversion tables for everyday use on a farm.

In all there are over 200 drawings and illustrations covered in the book.

HANDBOOK OF LIVESTOCK EQUIPMENT is best suited as a reference book. Agriculture teachers who teach in livestock producing areas will find this book to be of considerable value. It is also a handy reference for cattlemen, students, and others involved with livestock handling and production.

Robert S. Howard  
Oklahoma State University



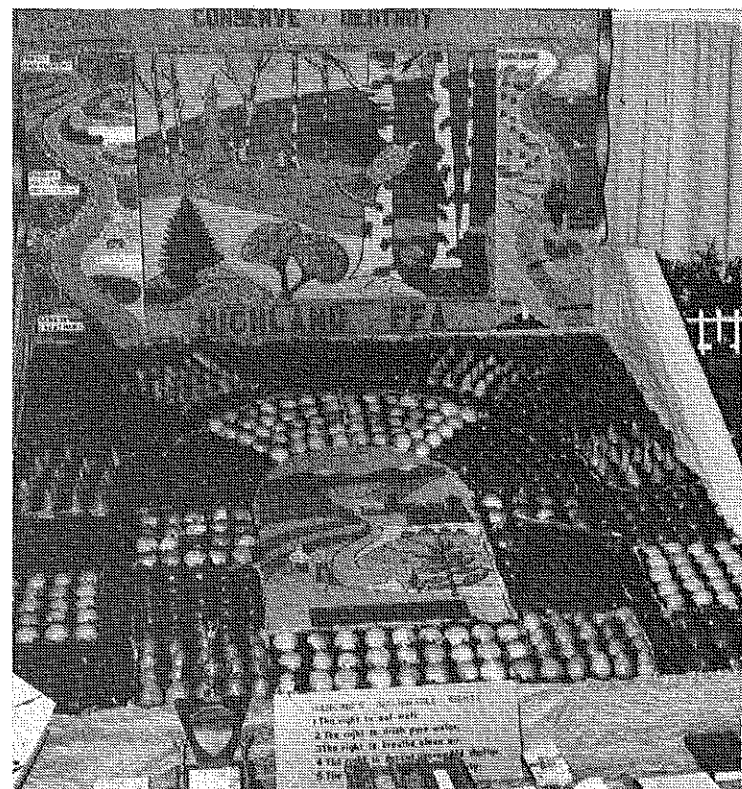


Youth Involved Through Competition — Future Farmers of Colombia judging swine at the National Convention of Future Farmers of Colombia at the Agricultural School of Valsalice. (Photo from Mr. Lennie Gamage, Manager, International Programs, Future Farmers Association).



Youth Involved in Wildlife Conservation. The Sanborn, Minnesota FFA Chapter built wooden "Duck Boxes" as one of its Projects. The Chapter checks the boxes in the spring to see how many ducks inhabit the boxes. FFA Advisor, Tony Machtemes holds FFA member, Kurt Jensen (the kind of support most advisors are willing to give). (Photo from Tony Machtemes).

by Richard Douglass



Youth Involved in Preparing Exhibits. Roy Hallstrom uses the annual Horticultural Booth as an excellent teaching tool. Enthusiastic competition exists between the Highland Chapter and the 12 other Chapters in the Yakima Valley of Central Washington. The themes are kept simple and usually show what the FFA does or stands for, what is taught in Vo-Ag, techniques needed to produce quality produce, the importance of agriculture, the necessity for preserving a livable environment, or procedures for conserving natural resources. Benefits to each chapter are good public relations. Members really examine the produce of the area and begin to think about how they can improve the quality. Those in charge of some part of the booth develop executive ability. (Photo by Roy Hallstrom, Cowiche, Washington).



Youth Involved in Eye-Opening Study Tours. A recent study-tour to Europe didn't make 15 Kansas FFA members experts on European affairs, but it was a real eye opener. They found things happening and decisions being made that had a bearing on Kansas Agriculture 6,000 miles away. They talked with a member of a local west German Young Farmer organization. Local chapters are organized in a practical and businesslike manner, often by special areas of interest, such as vineyards and winemaking. Chapters are organized for those interested in beef production or in small grain crops as was the young farmer interviewed. (Photo from Earl Wineinger, Ass't Supervisor, Agricultural Education, Topeka, Kansas).



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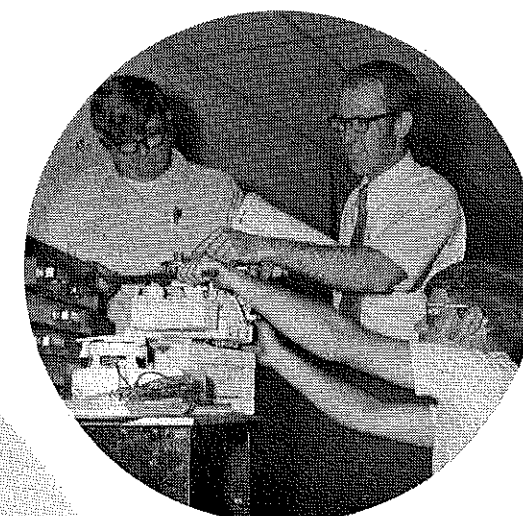
# Agricultural Education

May, 1973

Number 11

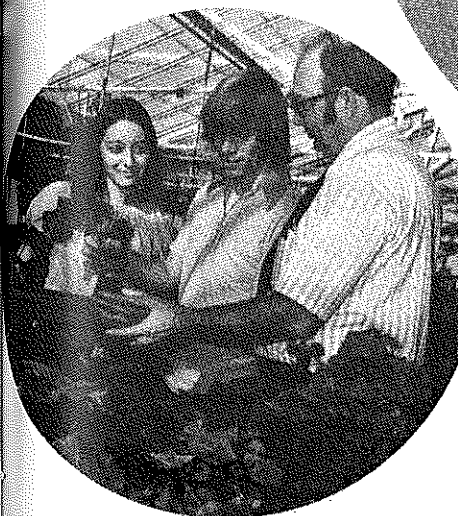


**SUPERVISED**



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**PROGRAMS**



Theme—

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