Honors for Agricultural Education

Members of the agricultural education profession are dedicated to their careers. Awards are made to some of those who serve in an outstanding manner. Several recent award recipients are shown here.

1

2

3

1. Glenn Lewis, retired State Supervisor in Maryl... shown receiving a Certificate of Merit Award in ... culture from Robert L. Gluckstern, chancellor ... University of Maryland. The presentation was ... during an Agricultural Forum held at the Univer... (Photo courtesy of the University of Maryland.)

2. Honorary Life Membership in the National Voca... Agricultural Teachers' Association is granted to ... ed individuals who have made outstanding cont... tions to the profession. Recent honorary life me... include (left to right): Robert L. Kelley, Kent... Ralph W. Edwards, Idaho; and Floyd J. Doering, ... consin. John Mundt, NVATA past President, is ... presenting the memberships. (Photo courtesy ... NVATA.)

3. Ray Wiegand (left) of Evansville, Wisconsin, is ... being presented with the NVATA Agriculture Te... Recognition Award by F.J. Koebrich, Director of ... keting Services for Pfizer Agriculture Division. ... award was presented because Mr. Weigand advise... National FFA Swine Production Proficiency A... Winner. (Photo courtesy of NVATA.)

4. The six recipients of the NVATA Outstanding Y... Member awards are shown here with Robert E. B... (right) of the U.S. Steel Corporation. The recipients ... (left to right): Richard S. Callahan, Tennessee; C... Kubicek, Nebraska; J. Larry Every, Oklahoma; J... A. Fraley, Missouri; Darwin McKay, Idaho; and B... K. Waddell, Virginia. (Photo courtesy of NVATA.)

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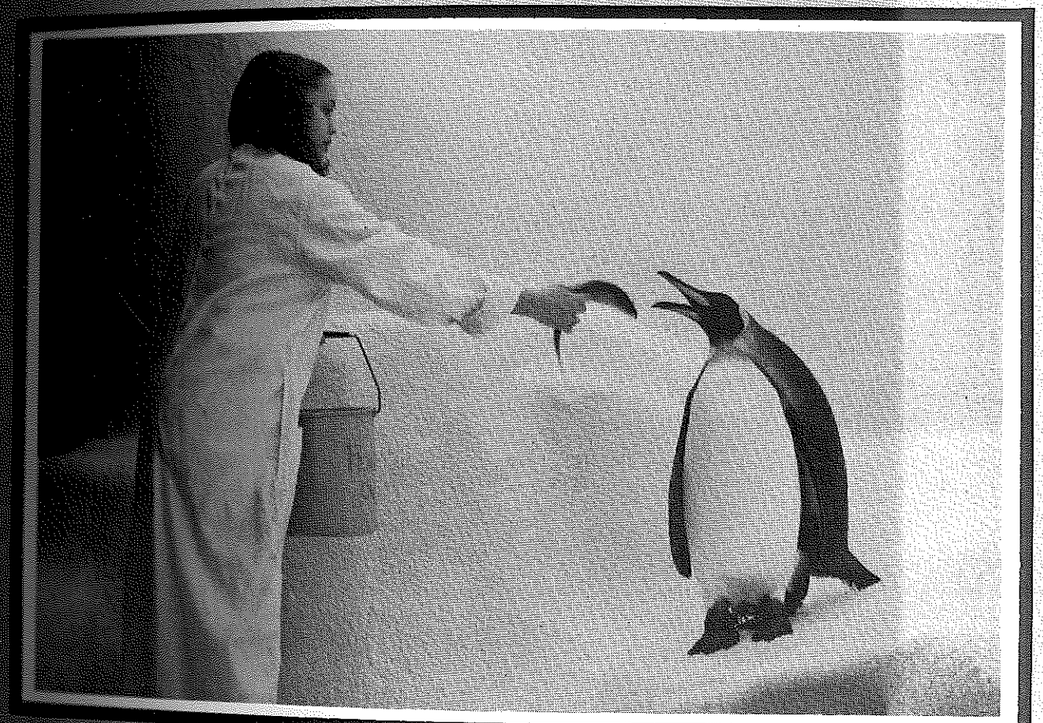

THEME: Experiential Programs

THE
AGRICULTURAL EDUCATION
MAGAZINE

May, 1980 Volume 52 Number 11

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ARTICLE SUBMISSION

Articles and photographs should be submitted to the Editor, Regional Editors, or Special Editors. Items to be considered for publication should be submitted at least 90 days prior to the date of issue intended for the article or photograph. All submissions will be acknowledged by the Editor. No items are returned unless accompanied by a written request. Articles should be typed, double-spaced, and include information about the author(s). Two copies of articles should be submitted. A recent photograph should accompany an article unless one is on file with the Editor.

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Experiential Programs Can Help Answer The Big Question

JASPER S. LEE, EDITOR
(The Editor also serves as Professor and Head, Department of Agricultural and Extension Education, Mississippi State University.)

Experience — have you had any? This is a typical question that employers ask prospective employees. Employers are constantly looking for employees who have had experience, especially experience related to the jobs which are available. Employers also want employees who know how to perform, not just about performance. Experiential programs help job seekers answer the question, "What can you do?"

Educators in vocational agriculture/agribusiness have long taken pride in the fact that student learning was rooted in practical, hands-on experience. Nothing can take the place of learning about the real world by learning in the real world. In vocational agriculture/agribusiness, supervised occupational experience is the vehicle by which the "real world learning" takes place.

How We Provide Experience

Supervised occupational experience (SOE) is an individually planned, continuous program to develop the competencies needed for occupational entry by a student. The plan should provide for student growth and expansion while under the supervision of the teacher of vocational agriculture/agribusiness. SOE is more than a project or single, short-term activity. SOE must show progressive achievement by the student toward his or her career objectives.

Three ways are commonly used to provide SOE — ownership, placement, and simulation. Ownership SOE involves students owning and managing retail agricultural outlets or services, growing crops, or raising livestock. Placement SOE involves students getting on-the-job experience on a farm or ranch or in an agribusiness. The students do not own the farm, ranch, or agribusiness, but are usually paid for their work. Simulated SOE involves using the laboratory facilities of the school to replicate work situations found in agricultural industry. With simulated SOE, the students often do not own or receive pay from their experience activities. Of course, it is preferable if such activities can provide students with a monetary return or the experience of ownership.

Our Attitudes Toward Experiential Programs

On the surface, we say that our profession is committed to providing supervised occupational experience for all students. But, what is it like in practice? Does such a philosophy permeate local secondary programs? Recent research indicates that our commitment to supervised occupational experience tends to be superficial.

A national study[1] made in 1978 of 382 teachers of vocational agriculture/agribusiness produced several findings which provide insight into how teachers feel about SOE. Slightly over 30 percent indicated that to obtain training stations and place students in training programs did not apply to them. Further, 31.4 percent indicated that to supervise students did not apply to them, while 29 percent indicated that developing training plans did not apply to them.

In 1979, a study was made of 212 randomly selected teachers of vocational agriculture/agribusiness in the Southern Region of the United States.[2] The findings are very similar to the national-level 1978 study except that a slightly higher percentage of teachers did not feel that SOE activities applied to them. It was found that 31.9 percent of the teachers felt that to obtain training stations did not apply to them. Further, 31.4 percent indicated that to place students in training programs and develop training agreements and plans did not apply. One-third (33.3 percent) of the teachers indicated that to supervise training stations did not apply to them.

It is apparent that SOE is not felt to be important by many individuals at the local level. Why? It is impossible to specifically provide an answer. The decline in how teachers feel about SOE may be due to many factors. One is the increased vocational program offerings in schools. There is a tendency for some vo-ag teachers to adopt the philosophy that "if the trade and industrial education teachers don't have to provide SOE, why should they?" Another reason for the decline may be that in some schools only cooperative program teachers are given responsibility for the experiential programs of students.

Experiential Programs and the Future

A critical situation has emerged to confront our profession on the role and scope of SOE in vocational agriculture/agribusiness. Current practices and trends indicate that action is needed. We must search for new, more responsive approaches to SOE. We must strive to educate teachers, vocational administrators, and other individuals with responsibility for vo-ag about SOE. We need to conduct pilot programs to seek new ways of providing experi-

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Experiential Programs Can Help Answer The Big Question

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ential programs and using teacher expertise in doing so. We must have national-level research into the importance of experiential learning in career establishment and advancement for our graduates. Is it really as beneficial as we say it is?

"Learning by doing" is the trademark of instruction in vocational agriculture/agribusiness. We must hold to this principle. Without "learning by doing" through experiential programs we cease to be vocational education in agriculture/agribusiness.

May, 1980

This issue of the MAGAZINE focuses on experiential programs. David L. Williams of Iowa State University, as theme editor, has worked with a team of authors to obtain a variety of articles on experiential programs. Some articles are practice oriented, while others are [illegible] oriented.

References

[1]Susan F. Moore. *A Study of the Self-Perceived Teaching Effectiveness of Female and Male Vocational Agriculture/Agribusiness Teachers in the United States.* Mississippi State University, 1978.

[2]Richard M. Hylton. *A Study of the Self-Perceived Teaching Effectiveness of Vocational Agriculture Teachers in the Southern Region of the United States.* Mississippi State University, 1979.

The Cover

Experiential programs expand the facilities beyond those available on the school grounds. The cover photograph shows a student enrolled in the Natural Resources Management Program in Cincinnati, Ohio, feeding penguins in the Zoo's Bird House. The penguins are conditioned to receiving feed from a person dressed in white coat and black boots. (Photo courtesy of Claire Ehrlinger, Instructor of Natural Resources Management, Cincinnati, Ohio.)

THEME

Experiential Learning in Agricultural Education

BY DAVID L. WILLIAMS, THEME EDITOR

Editor's Note: Dr. Williams is a Professor in the Department of Agricultural Education at Iowa State University. He has been very active in researching and developing materials for experiential programs.

"High School Just Wasn't Worth Much" was a headline that appeared in a newspaper a few years ago. The headline was describing a finding of Project Talent where many Americans in their early 30's had indicated that their high school courses were not helpful in preparing them for occupations. How will the students of today rate their vocational agriculture education ten, fifteen, or twenty years from now? The findings could duplicate the one of Project Talent if we fail to keep our programs experienced-based.

Experiential learning (education) is a relatively new term that is currently being used in educational circles to describe the process of developing attitudes, knowledge, and skills for occupations by participating in work environments. Vocational agriculture teachers have long recognized the value of learning by direct experience in performing jobs associated with agricultural occupations. Through the years, "farm practice," "supervised practice," "supervised farming," "work experience," "supervised work experience," "cooperative vocational education," and "supervised occupational experience" (SOE) have been terms used to describe general and/or specific programs where students participated in practical learning settings at the student's home, on a farm, at school, or in a community business.

Vocational and technical agriculture teachers should not abandon this effective learning procedure for students at a time when other fields of education are just beginning to realize its potential in the learning process. Experiential learning in settings of agricultural activity allows stude[illegible] to live and breathe tasks associated with occupations. T[illegible] is what vocational education is all about.

Diversity in students' interests, abilities, backgrou[illegible] aspirations, resources for SOE programs, and occu[illegible] tional objectives in agriculture creates a challenge in p[illegible] viding experiential learning in vocational agricultu[illegible] Special efforts will be required to identify existing and n[illegible] resources to provide experiential learning for such s[illegible] dents. Teachers will need help from parents, school p[illegible] sonnel, business people, advisory committee membe[illegible] and others in the community in activating resources [illegible] provide individualized learning for each student. As sch[illegible] agricultural laboratories (greenhouses, land, orchard[illegible] crops, livestock, shops, conservation areas, business c[illegible] ters) increase in popularity as a means of providing SO[illegible] for students, arrangements must be made for manag[illegible]

[illegible] learning environments and for supervising student experiences at these sites.

Teachers will not be able to shift the day-to-day supervision of students' SOE programs at these sites to parents (as with home-based supervised farming programs) or employers (as with business-based cooperative occupational experience supervised employment). An already overloaded teacher should not be expected to function in these capacities. There are ways teacher aides or laboratory supervisors could be utilized effectively in the vocational agriculture program.

The authors of the articles in this issue explain how they have developed experiential education programs for their students, describe the results of such programs, and identify issues and principles associated with experiential education. The articles specifically prepared for this issue illustrate that experiential learning is appropriate at both secondary and post-secondary levels; in wildlife conservation, horticulture, agricultural mechanics, agribusiness, and agricultural production instruction; and for both urban and farm students. Readers are challenged to look for total experiential programs that could be transported to their program and for small ideas that can be used or adapted to provide or enhance experience-based learning for students enrolled in vocational-technical agriculture programs. We need newspaper headlines that read "Vocational Agriculture Was Worth Much." Action today is required to produce such results tomorrow.

THEME

Agricultural Production Experiences At School For The Urban Student

BY ALLEN J. DIETZ

Editor's Note: Mr. Dietz is a vocational agriculture instructor at Sycamore High School in Sycamore, Illinois.

The type of student enrolled in vocational agriculture today is drastically different from the type enrolled 15 years ago. Thus, the curriculum has changed to meet the needs of this new type of student. In the early 1960's, most vocational agriculture students were from a farm, the curriculum dealt with farming, and the students were required to have some type of agricultural production supervised occupational experience (SOE) programs.

With the Vocational Education Act of 1963 and the amendments of 1968, the emphasis was changed, agricultural education was broadened so students could receive training in all aspects of the agricultural industry. Thus, the movement of more urban or town students enrolling in vocational agriculture classes began. Also during these past years, girls were allowed to become members of the Future Farmers of America (FFA) and their numbers on vocational agriculture class roles continue to increase.

During this time period, it was quite evident that the number of farmers required to feed this country was decreasing. Even many of the farm students enrolling in vocational agriculture would not be able to return to the farm, or not desire to do so. Many would need, or want, to seek employment outside of production agriculture.

The urban students could not raise a steer, a hog, or an acre of corn in their backyards. Also students with an agribusiness interest had a difficult time finding facilities for the types of SOE programs they desired.

The staff of the Sycamore High School Vocational Agricultural Department, with the recommendations of the Sycamore Agriculture Advisory Council, decided to make a drastic change in its program in 1971 by allowing all students interested in pursuing a career in agricultural industry to enroll. One of the basic philosophies maintained, however, was that all students, whether seeking a career in production agriculture or agribusiness, need a basic knowledge of production agriculture. For example, if a student is going to be selling feed and dealing with farmers, the student needs to know the basics of livestock production if he/she is to be successful.

At Sycamore High School, all students enrolled in vocational agriculture are required to be a member of the FFA and to conduct an SOE program. FFA and SOE are integral parts of a total vocational agriculture program that gives students the leadership and hands-on experiences needed in agricultural industry. For their participations, students receive extra vocational agriculture credit that counts toward graduation.

The present membership of the Sycamore FFA Chapter is 227. Over 50 percent of these vocational agriculture students live in town, but need hands-on basic production agriculture experiences. Thus, farming and production horticulture experiences for students have been greatly expanded. Described below are experiential programs designed to enable learners to develop agricultural skills using facilities at Sycamore High School.

Livestock Experiential Program

The Sycamore FFA Chapter maintains a 50 head flock of Southdown sheep housed at the high school in a chapter owned barn. This program is reserved especially for fresh-

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Agricultural Production Experiences At School For The Urban Student

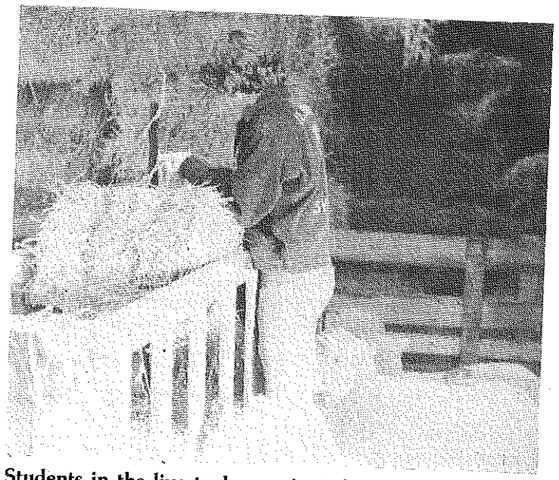
(Continued from Page 5)

man students living in town who wish to work with livestock. Each fall, students select their individual sheep from the flock and are involved throughout the entire year in all aspects of production (breeding, lambing, feeding, etc.). They show the ewes and lambs at the sectional FFA fair during the summer. By the time students reach their second year of vocational agriculture, they rent facilities for their livestock on nearby farms or switch their SOE to an agribusiness program.

A chain gilt program was initiated in 1977 to facilitate and encourage high quality swine operations. However, this did not meet the needs of students who did not have required facilities. The agriculture advisory council is currently exploring the possibilities of the vocational agriculture department renting or purchasing buildings close to town in order to expand the livestock program into swine and beef production.

Horticulture Experiential Program

One of the purposes of the Sycamore Vocational Agriculture Department is to provide means for students to develop skills in the commercial production of horticultural plants. Students interested in horticulture work with plants in a school owned greenhouse. Plants are sold on a year round basis to teachers, parents, students, and others. Also students maintain all plantings on school owned property which includes four grade schools, one junior high, and a board of education office. Students also maintain a small nursery on school owned property. After students develop basic horticultural skills, they seek employment in landscaping and horticultural maintenance of homes and buildings in the community.



Students in the livestock experiential program gain valuable experience in caring for animals.

Farming Experiential Program

In 1979, 204 acres of land were rented for the prod
of corn, soybeans, and oats. This land is located in
ferent fields in the Sycamore community. For 19
acres of land have been rented. Students manag
operate the entire farming operation, including th
tion of crop varieties to plant, planning the soil
program, and operating the chapter owned ma
valued at $75,000. All farm equipment is house
machine shed at school. During the farming season
operations begin at 3:30 p.m. when school is out
to 10:00 p.m. many nights, plus weekends. The
involved are town students, many of whom have
operated farm equipment before. The farm equip
maintained by the students throughout the entire ye
major maintenance completed during the winter a
maintenance while in operation. Students who ha
in the farming program have been hired by farmers
ditional training or have entered positions in agribu
Sycamore High School has six former town student
received their basic production agriculture educ
through the Sycamore High School Vocational Agri
Department who are now farming full time.

**This student at Sycamore High School is preparing
operate the combine owned by the FFA Chapter.**

At-School Experience Helps

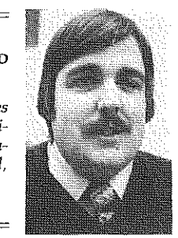
In summary, the vocational agriculture teachers at S
more believe that "at-school" experiential programs
prepare urban students for careers in the agricultural
dustry. Vocational education is the preparation of stud
to enter the world of work and must provide students w
practical experiences that enable them to acquire attitud
knowledge, and skills that will allow for successful en
and advancement in their chosen occupation. In voc
tional agriculture at Sycamore High School, urban
dents start their vocational education with a basic und
standing of production which is the foundation for all
agricultural industry. FFA chapter-operated and scho
owned facilities provide the resources to make these exp
iential programs possible.

THEME

Experiential Learning in Horticulture — The Pulaski Story

By Elissa Steeves and Wythe Morris

Editor's Note: Ms. Steeves and Mr. Morris are horticulture instructors at Pulaski County High School, Dublin, Virginia.



A "learning to do and doing to learn" philosophy has been put into practice in the vocational horticulture program at Pulaski County High School at Dublin, Virginia. The instructors believe that the way to learn horticultural skills is through practice. The program is set up to allow students to master skills through "in-school" and "out-of-school" experiences. Experience-centered classroom and laboratory activities, FFA activities, and supervised occupational experience programs are important teaching-learning components of the three-year program.

The vocational horticulture program at Pulaski County High School began in 1974, with one part-time teacher and twenty students. Since then, the program has grown to two teachers, two one-hour classes of first-year horticulture, one two-hour class of second-year horticulture, and one two-hour class of third-year horticulture. During the 1979-80 school year, the horticulture facilities were doubled by the addition of two more greenhouses, providing more opportunities for students to develop horticulture skills.

Described below are some of the ways and means used at Dublin to provide experiential learning for students enrolled in the vocational horticulture program.

In-School Experiences

Greenhouse. The greenhouse affords an opportunity to produce many different crops including hothouse tomatoes, cut snapdragons and carnations, potted chrysanthemums, poinsettias, Easter lilies, house plants, bedding plants, and nursery crops. Through these experiences, students learn how to propagate plants, mix soil, fertilize, control pests, pot plants, water, and control photoperiod. Students operate and manage practically all phases of the production — planting and raising of crops to final sales and bookkeeping. Many of the skills learned in greenhouse operations provide a knowledge base for other areas taught in the curriculum.

Farm and Nursery. The school farm, approximately 56 acres, is used for both agricultural and horticultural crops. Students have planted White Pine seedlings to be used primarily for Christmas trees and forest products including pulpwood and timber. Student experiences include pruning, shearing, and maintaining the pines. A nursery plot, started several years ago, gives students experiences in not only the maintenance aspects of nursery production, but also management principles. Decisions have to be made concerning removing species which have become overgrown and impractical to attempt transplanting. Also, experiences are gained in soil management by taking and analyzing soil samples and in planning and developing seedbeds for liners rooted in the greenhouse.

Orchard. A small school orchard has been developed for growing apple seedlings for grafting rootstocks. During 1979-80, students grafted rootstocks and planted bare-root trees to expand the orchard site. These trees were pruned using various methods so that students may experience various methods and techniques in orchard management. Also, students practiced applying various sprays as a result of diagnosing insect and disease problems throughout the year.

Landscape Plant Collection. With a problem locating plant material for classes, a learning center that will give students experiences in many areas of landscaping and landscape maintenance will be initiated during the summer of 1980. The landscape plant collection will include plant materials commonly used in the FFA Horticulture Judging Contest. Students will be responsible for planting, mulching, fertilizing, pruning, and general maintenance of the collection. Students will be able to propagate many of the ground cover materials. Some of the plants which are native to this area may be collected from the wild, others will be acquired from local nurseries. Students will learn soil requirements, moisture requirements, hardiness, and exposure of individual plants. After these characteristics have been determined, proper transplanting techniques (bare root, ball and burlap, or container) must be used to insure survival. All plants in the collection area must be properly numbered and labeled. These experiences will give students an opportunity to develop skills needed in landscaping, landscape maintenance, aboretum, and botanical garden-related careers.

Container Nursery. The production of hardy plant materials in containers was initiated in 1978-79 with the production of garden mums in gallon containers. The students potted the cuttings and moved them to the lath house. Experiences in proper fertilization, irrigation, and spraying were gained in this activity. Students learned to use a fertilizer injector and gained experiences in preparing stock solutions, applying trace elements, insecticides, and fungicides through the injector. Students discovered first-

(Continued on Page 8)

Experiential Learning in Horticulture —

(Continued from Page 7)

hand the effects of increased fertility levels on various plant materials in both the lath house and the greenhouse. Hardy plants (mostly ground cover material) propagated by students in the greenhouse are later transplanted to containers.

Mechanics Laboratory. The agricultural mechanics laboratory provides many experiences for students in horticulture. Students learn that work in the horticultural industry requires many mechanical skills. Skill development activities include class construction of a greenhouse for home use, service and maintenance of small engines, and cleaning, sharpening, and maintaining horticultural tools. Students also learn about wood varieties and preservatives used to maintain plant growing structures.

Floral Design Laboratory. School facilities are used to simulate flowershop experiences. Students use creative skills in designing wedding bouquets, corsages, boutonnieres, sand terrariums, dish gardens, and both fresh and dry flower arrangements. Various holidays such as Christmas, Valentines Day, and Mothers Day keep students busy making bud vases, wrapping potted plants, and filling special orders.

Sales and Management Laboratory. The Pulaski County vocational horticulture program is a self-supporting operation, making money to buy expendable supplies and some small equipment. In order to do this, students engage in sales and some management activities. Students develop product knowledge, skills in working with people, and in selling. Students learn how to greet customers and prepare receipts. To develop management skills, they record and file charge receipts, prepare statements, record sales and purchases, and figure prices and profits.

Turf Establishment and Maintenance Area. The school football field provides a site for students to gain actual turf experience. Students' supervised experiences in turf management have produced one of the finest football fields in the area. Students gain experience in such turf skills as seeding and reseeding, fertilizing, disease and weed control, dethatching, airation, and mowing.

Out-of-School Experiences

Employment. While horticultural businesses are somewhat limited in the Dublin area, several students still have opportunities for employment experiences each year. Some students have been employed in flower shops where they gain experiences in designing, bookkeeping, and deliveries. Others have found jobs in landscape maintenance at local hospitals and universities, and the local school system has hired students for turf maintenance. Students have been employed by local nurseries, garden centers, and landscape contractors. Local department stores have hired horticulture students to take care of their houseplant and nursery departments. Employment experiences allow students to develop technical and personal skills relevant to the horticulture industry under real employer-employee relationships.

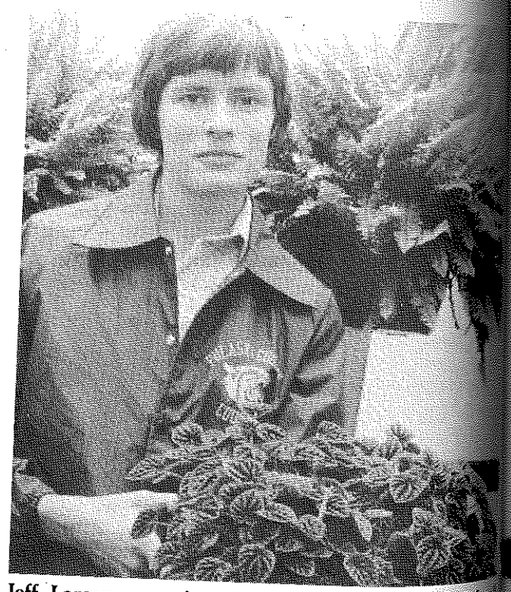
Entrepreneurship. Students are encouraged to develop small horticultural businesses where they can learn and earn. Whether their experience programs center around service-type jobs such as landscape maintenance, [illegible] spraying, or production enterprises such as bedding [illegible] production, vegetable production, foliage plant [illegible] Christmas tree production, students gain valuable [illegible] ences while earning money for their personal needs [illegible] lege, or expansion of their small enterprises into [illegible] Examples of horticulture entrepreneurships where [illegible] have had success are:

- Producing house plants and bedding plants for [illegible] a small greenhouse.
- Producing and marketing green beans and [illegible] for fresh vegetable sales.
- Contracting to provide landscape maintenance [illegible] local banks and businesses.
- Contracting to provide mowing services for the [illegible] munity hospital.

Such enterprises give students experience in the [illegible] tion and management of a small business which they [illegible] never be exposed to any where else in their formal [illegible] tion years.

Summary

As in all the areas of agricultural education, [illegible] based and/or community-based experiences help to [illegible] antee the success of a vocational program. Practical [illegible] iences where students can learn and apply horticul[illegible] skills are essential to prepare people for entry employ[illegible] in the horticultural industry. It has also been observed [illegible] people with experience advance more rapidly on the [illegible] than untrained entry-level employees. The Pulaski Co[illegible] horticultural program is designed to prepare people for [illegible] cupations in the dynamic and expanding horticultural [illegible] dustry. Experiential learning is considered essential in [illegible] endeavor.



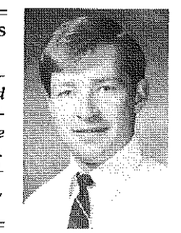
Jeff Largen, a senior at Pulaski County High Schoo[illegible] displays plants produced in his home greenhouse as a p[illegible] of his SOE program.

THEME

Wild Game — Experiential Learning In Meats and Conservation

By Douglas A. Pals and Eldon H. Betz

Editor's Note: Dr. Pals is assistant Professor and Head of the Department of Agricultural Education at the University of Idaho. Mr. Betz is vocational agriculture instructor at Meridian, Idaho.



[illegible] anything that flies or that walks with four legs." [illegible] Betz. I shot eight rooster pheasants Saturday, how many did you get?" Student comments and questions such as these indicate high student enthusiasm during Idaho's hunting season. Channeling this interest into useful learning allows vocational agriculture teachers to give instruction on the handling of meat and usefulness of meat cutting as it on wild game and domestic animals.

Idaho vocational agriculture instructor, Eldon Betz states, "being an Idaho resident who was raised on a farm, I took too much for granted. There was always an abundance of pheasant, quail, ducks, and geese around my home farm and plenty of deer and elk in the mountains. When we shot a gamebird or animal, we did our own butchering and many times butchered and packaged our own domestic animals." Using this home background and experience from college meat courses, Mr. Betz has developed experiential learning in meats and wild game conservation for sophomore vocational agriculture students at Meridian, Idaho.

The areas of instruction included in this unit are: (1) conservation of wild game; (2) identification of wholesale and retail cuts of beef, pork, and lamb; (3) selection of quality meat from domestic livestock; (4) preparation of consumer red meats, and (5) awareness of the meat industry as a consumer and as a career choice.

No Interest Approach Needed

Conservation of wild game is an instructional area that needs no interest approach. Most students, whether male or female, find the subject of outdoor life and wild game stimulating. The exciting hunting stories about the buck someone shot or the big bull elk Uncle Tom brought home, provide plenty of discussion material. Stories about hunters exceeding their limit or killing an animal and leaving it to the coyotes are discouraging. It's also upsetting to hear of the poor methods used to field dress wild game and the careless handling of the meat.

Class time is devoted to open discussion of these concerns. Students are taught that everyone should follow the hunting laws. It has been observed that the attitudes of students can be changed from one of "kill anything that flies or walks" to one of regulation and common sense.

Dressing Wild Game

When the class has explored the subject of game laws, especially bag limits, they progress to the field dressing and handling of the meat. With the use of good visual aids, the proper techniques of dressing wild game are explained. Some of the key items taught are:

(1) Shoot the game in the head or heart for quick kill. This reduces or eliminates suffering to the animal and loss of meat.

(2) Never approach a game animal until you are certain it is dead. This prevents the animal from pawing at a person and causing injury to the hunter.

(3) Remove the scent glands from the inside and outside of the rear legs. If the substance from the scent glands touches exposed flesh, it will flavor the meat and this is very undesirable.

(4) Cut the throat of the animal for proper bleeding. One should always do this before removing the entrails.

(5) Carefully remove the entrails.

(6) Properly transport the game from the field to the campsite and home. A spreader should be used in the rib cage to allow for quick cooling. Keep the game protected while in transport. A clean tarp, game bags, or even an old clean bed sheet work very well. Examples of poor methods of transporting and protecting the game meat are offered for discussion. A favorite example is hauling the game on the top of a vehicle. The students agree this practice does more for the hunter's ego than for protection of the game meat. Such a practice allows insects and dirt to collect on the game.

(7) Black pepper can be used during warm weather to discourage flies from laying eggs on the exposed flesh.

(8) Quickly remove the hide. The quicker the hide can be removed from the animal, the better. The hide contributes to the flavoring of the meat and removal of the hide helps eliminate a strong game taste.

Handling Game

Following the lessons on field dressing and transporting game, learning focuses on handling of the meat. Using actual game meat, the students are taught how to cut and

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Wild Game — Experiential Learning In Meats and Conservation

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wrap the meat properly. (If the bones and excess fat are removed from certain game meat, it may not taste as strong.) With deer and antelope, everything is boned and the meat is cut into steaks and roasts. The remaining meat is cut up for stew. Students are taught to double wrap the meat and label the package correctly. All students enjoy this experiential learning and can apply what they have learned from cutting meat from wild animals to the study of meat from domestic livestock. After completion of the wildlife meat cutting experiences, learning proceeds to other div[illegible] the meat course.

One of the difficulties encountered in teach[illegible] game meat cutting is the inability to schedule the ar[illegible] a wild game carcass. Mr. Betz depends upon the [illegible] expertise of himself or his students. Some years th[illegible] "teachable moment" never arrives.

For those vocational agriculture instructors who [illegible] areas where hunting exists, an instructional unit o[illegible] game conservation and meat cutting provides a ex[illegible] capitalize on student interest. It offers a chance to p[illegible] guidance to students in following hunting laws, u[illegible] resources wisely, and introducing a unit on meats in a[illegible] teresting way.

THEME

Agribusiness: The Realistic Learning Center for Postsecondary Students

By Thomas Lindahl and Peter Fog

Editor's Note: Both authors are at the University of Minnesota Technical College at Waseca. Dr. Lindahl is Chairman of the Agricultural Business Division. Dr. Fog is Chairman of the Agricultural Industries and Services Division and Pre-Occupational Preparation Program Coordinator.

How do you provide a classroom that can supply the latest equipment, facilities, experiences, problems, and human interaction that are found in a real agricultural business today? Most educational budgets do not have the dollars necessary to offer such real-life experiences in the classroom. It is not possible to simulate interaction with customers and business personnel in a traditional classroom setting. Educators need to remember that students won't "grow" unless the proper environment for learning and growth is present. The wrong environment can hinder and even stop student development and learning. One method used in many postsecondary agricultural business curricula to assist with student growth is student work experience programs using facilities and environment of cooperating businesses to provide opportunities for teaching and learning. At the University of Minnesota Technical College, Waseca, these experiences for growth are provided through:

1) A quarter of work experience in agricultural business termed Pre-Occupational Preparation One (POP I).
2) A second more specialized work experience program termed Pre-Occupational Preparation Two (POP II).
3) Directed study experiences in agricultural business.

Pre-Occupational Preparation I

The Pre-Occupational Preparation Program is mandatory and a part of every student's curriculum. The POP Program has only one major goal: to enable students to learn as much as possible about their future careers. The POP Program enables the student to apply classroom knowledge and theories to the actual world of work. In addition, learning is enhanced by exposing the students to non-classroom experiences where additional skills necessary for successful entry into their chosen occupations can be developed. The specific objectives to achieve this goal are:

1) to enable students to learn more about the occu[illegible] tions of their choice through work experience;
2) to allow students to experiment with occupati[illegible] goals early enough to alter them without losing [illegible] uable educational time;
3) to encourage students to assume a more mature [illegible] tude toward their academic preparation;
4) to assist students in seeing the need for classroo[illegible] struction as it relates to their occupational goa[illegible]
5) to permit students to work in actual situations [illegible] cannot be duplicated in the classroom;
6) to give students the experience of working [illegible] equipment which, because of its size or conte[illegible] not available at the college;
7) to enable students to acquire experiences ga[illegible] through actual customer and employee relati[illegible] ships;
8) to allow students the opportunity to develop a se[illegible] of responsibility required in the business world;
9) to help students learn, through real experience[illegible] values of personal qualities such as neatness, po[illegible]

[illegible] courtesy, and concern for the clientele with whom they are working;
[illegible] familiarize students with the experiences related to the process of seeking employment; and
[illegible] provide the college with valuable information about industry, establish public relations contacts, and obtain advice from business leaders in areas of curriculum, laboratory planning, student recruitment and placement.

Any cooperative vocational educational program must have three parts in order to be successful. The first requirement is a faculty that recognizes the value of the Pre-Occupational Preparation program in the development of a student. The second need is for interested employers who are willing to assist in the training of young people for jobs in their fields. Finally, the third essential is for a college administration that will give its wholehearted support to the Pre-Occupational Preparation program in all its phases. Student exposure to the POP program begins with a discussion of the objectives and purposes of the program by the POP coordinators during the required freshmen orientation course. A 25-minute film presentation which shows students training in businesses related to their majors is used during the orientation. Students describe their job situations and testify as to the value of the POP program. After the film presentation, the POP coordinator leads a discussion which provides the details of the program and lists the steps students need to follow to enroll in the program. During the orientation course, each student discusses the program further with his/her instructor-counselor, completes an information card, and makes a decision as to the time for enrollment in the POP program.

One quarter before the student plans to enroll in the POP program, the instructor-counselor and the student complete specific learning goals and objectives for his/her on-the-job experience. These goals and objectives are attached to the employment application form and used in personal job interviews with potential employers. The POP coordinator, after consultation with the student, assists in finding an "on-the-job training center" for the student. After the placement, members of the faculty are assigned to each student according to the student's major. It is the responsibility of the instructors to visit the student twice during the twelve weeks to determine progress, further develop goals and objectives and assist in solving problems which have developed with the student and employer. Supervisory visits also enable faculty members to broaden their knowledge of each business by talking to employers and observing the tasks assigned to the student. Business contacts enable faculty members to become more knowledgeable about business methods and to stay current with new developments taking place in the business world.

The students are required to make monthly reports during the three months they are on the job. The first report requires that they become familiar with the business structure, the size of the business, the administrative structure, the products sold, and the trade area serviced, and to describe their first month's experience. In the second report, students indicate progress made, the number of objectives achieved, their deficiencies as they affect their job, and what changes can be made to improve the experience. The third report is scheduled for the ninth week of employment. At this time the faculty supervisor meets with the student on his/her second supervisory visit. Together they develop a comprehensive outline of specific experiences needed by the student to achieve his/her occupational goals. All three reports are evaluated and considered as part of the student's grade for the program.

A potential employer interviews the student the quarter before the student enrolls in the POP program. The job interview focuses on the student's job application form and the student's learning goals and objectives. Because the employer is expected to make the interview as meaningful as an interview for a regular prospective employee, the interview has been a valuable educational experience for the student. After the interview, an agreement is signed by the student, the employer, and the college. The employer agrees to meet the student's learning goals and objectives and also agrees to give the student as large a range of experiences as possible in the business. The agreement also spells out the length of time the student will work and the salary to be paid. In addition, the POP coordinator stresses the need for the employer to give as much assistance as possible in order for students to learn, and the importance of maintaining open lines of communication between the student and employer.

An important responsibility of the employer is to evaluate the student at the end of each month. The employer evaluates the student in each of twelve employee-work-characteristic categories. Upon completion of the evaluation form, the employer conducts an evaluation conference with the student. The employer discusses the areas where the student has excelled as well as weaknesses observed. This conference gives the student an opportunity to ask questions about the evaluation or the job in general. The spirit of the conference should be one of improvement. If a problem or weakness is identified early in the POP employment, the student has an opportunity to make im-

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A University of Minnesota Technical College, Waseca, student receiving instruction during his Pre-Occupational Preparation program at an agribusiness.

Agribusiness: The Realistic Learning Center for Postsecondary Students

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provement before the next evaluation. Employer evaluation forms are mailed to the POP coordinator where they are used in assessing the student's progress in reaching his/her goals.

Pre-Occupational Preparation II

Many students in the Agricultural Business Program have not had any previous work experience in business. This has resulted in the use of POP I as an initial exploratory learning opportunity in a business. As a result, a need developed for additional experiences to provide students with skills more closely related to business functions such as business analysis, accounting, sales, and other merchandising activities. A second Pre-Occupational Preparation program, termed POP II, was created to fill this need. The objectives of the POP II program are:

1) to develop an increased level of job responsibility, through a set of carefully planned learning goals;
2) to develop additional skills in the student's chosen career by providing employment in job areas allied to the initial work experience;
3) to develop added management and or sales skills in an area directly related to future employment;
4) to move from career exploration to career development in the student's employment preparation process;
5) to develop job experience and preparation in areas of employment unrelated to previous employment experience; and
6) to further develop the personal qualities of cooperation, customer client relations, and work attitudes.

The POP II program is relatively new and students are only beginning to use this experience in the further building of business skills. Students enrolled in POP II are required to average twenty hours of work experience per week for eleven weeks.

Directed Study Experience

Directed studies to obtain experience in agri- business is the third method presently being used b business students to learn in an agribusiness setting activity is of special value to students enrolled in th and marketing major. The major objective of this is to provide actual sales experience for students. S enrolled in the sales major are required to have a re sales experience (which is evaluated) before gradua Greater sales experience has been helpful in assistin dents to select specific occupations, and provides with definite sales skills which they can later u "selling" themselves to an employer. Students deve sales experience plan with their instructor-counse which may involve one of several types of experie such as:

1) selling for a local agricultural business which have a special promotion;
2) assisting in on-going farm sales programs in agri tural businesses; and
3) developing direct sales programs with seed co other agricultural products.

Experience in selling provides students with many lenges. Being able to cope with highs and lows in s selling not only offers a challenge to emotional stabi but also offers financial rewards and success as well.

Summary

All of the agricultural business experiences discusse this article provide for teaching and learning in a real b ness environment. Although students learn busi methods and skills in an actual business environment, also learn in the traditional classroom setting. Compa and evaluating these two experiences expands the learn process even further. Student growth has been the ov whelming result of using real businesses as classroo Students have been allowed to grow on their own und the supervision of both experienced business people professionally trained teachers. The agribusiness cla room has expanded its walls to include the agricultu business world, and the results have proven to be hi rewarding and long lasting for students.

BOOK REVIEW

PRINCIPLES OF HORTICULTURE, **by Ervin L. Denisen, New York: Macmillan Publishing Co., Inc., 1979, 483 pp., $14.95.**

The author did an excellent job in meeting the two major objectives in writing PRINCIPLES OF HORTICULTURE. These objectives were: 1) to provide a balanced text emphasizing the principles of horticulture, and 2) to enlighten the reader in the far-reaching aspects of horticulture and how it enters into his/her daily life. The textbook is divided into three segments, namely: 1) "Fundamentals of Horticulture" which discusses the classification, anatomy, growth, and general environment requirements of horticulture plants; 2) "Skills and Practices in Horticulture" which discusses such areas as soil, water, light, and temperature management, reproduction, pruning practices, pests and their control, harvesting/storage, and marketing of horticultural products (a section on plant breeding is also included in this section); and 3) "Horticulture for the Home" which includes discussion on such topics as planning the home grounds, the lawn, and the home vegetable garden.

The book could be recommended as a text for general horticulture classes at the college level or for advanced high school classes in horticulture, especially at the vocational center level of instruction. It could be readily used as an instructor's reference text at all levels of education. This second edition includes an **Instructor's Supplement** which serves as an overview for each chapter.

The author is a Professor of Horticulture at Iowa State University where he earned his masters and doctoral degrees in horticulture. He holds membership in many horticultural organizations and societies.

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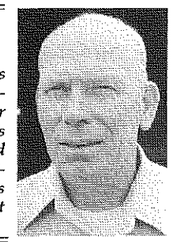
THEME

Postsecondary Instruction — Agricultural Mechanics Education at Kirkwood



BY LARRY STATLER AND ED SCHERICH

Editor's Note: Both authors are at Kirkwood Community College in Cedar Rapids, Iowa. Mr. Statler is Head of Agribusiness and Natural Resources Department. Mr. Scherich serves as Associate Department Head.

Agricultural mechanics is more than a vocational subject at Kirkwood Community College, Cedar Rapids, Iowa. It is a core for all agriculture programs in the school. It is also a specialized offering at the college. This article explains how agricultural mechanics training provides a bond for all postsecondary agriculture programs.

Too often, the teaching of agricultural mechanics at the postsecondary level is restricted to a single program. Such a program frequently emphasizes the mechanic and his wrench, and neglects the areas of mechanization that have application to specialized agricultural occupations. This sort of thinking helps to feed a sometimes mistaken public image of career/vocational education as being too narrow, producing drone-like graduates with singular skills and little sense of responsibility to society.

The Kirkwood Program

Kirkwood enrolls more than 400 students in eight agriculture and natural resources career programs. Virtually all of the students are given broad exposure to mechanization training. Kirkwood's production agriculture students are not led away from emphasis on producing corn, soybeans, cattle, and swine. But, they cannot escape the fact that mechanization permeates all phases of agriculture. The production agriculture students take separate courses in farmstead mechanization and planning, machinery economics, farm/shop maintenance, and construction techniques (with emphasis on mechanical systems and automation). Likewise, a core of agricultural mechanization is also found in the Agriculture Sales and Service, Horse Husbandry, Animal Health Management, Rural Building Construction, and Marine/Small Engine Mechanics programs.

Kirkwood's broad concept of agricultural mechanics instruction does not mean that it ignores the need for specialized mechanics training. The college's two-year Farm Equipment Mechanics program prepares students as entry-level machinery mechanics, service representatives, and supervisors. This specialized view of agricultural mechanics deals only with farm equipment repair and servicing. It does not attempt to teach other areas such as plumbing and automation.

The content of the Farm Equipment Mechanics curriculum is as follows:

- First Year — Fundamentals in tractor electricity, gasoline engines, assembly, and handling of farm machinery including implement truck operation, and reconditioning and repair of used farm equipment.
- Second Year — Diagnosis and repair of farm tractors and systems including gasoline and diesel fuel systems and engines, hydraulics, transmissions, and final drives.

The program leads to a diploma at the completion of the first year. Those who complete the full two-year program receive the Associate of Applied Science Degree. Some students leave the program early to accept jobs, but most choose the two-year study option.

Kirkwood works closely with the farm implement industry in east central Iowa through a program advisory committee to identify the training needs of farm equipment mechanics. Performance objectives have been written for the program to direct learning experiences that will develop specific job competencies dictated by industry.

Since 1978, on-campus agricultural mechanics instruction has been provided in a modern, 39,000 square foot specialized laboratory facility. Experiential learning is the theme throughout the agricultural mechanics instructional program. With the cooperation of the farm equipment dealer industry, students are provided day-to-day exposure to maintenance/repair work on the most modern farm equipment, both in the college laboratories and in dealer shops.

The program also accepts repair and maintenance jobs from farmers, but only when the work is referred to the students by implement companies. This arrangement promotes good relations between the college and the agribusiness community.

Agricultural mechanics instructors are conditioned to deal with more than skill performance. They use the following progression in their teaching: awareness, knowledge (how to do something), performance (doing something), and proficiency (doing it speedily and profitably).

Kirkwood attempts in its mechanics program to strike a balance between training for entry-level employment and training for career advancement. With the rapid increase of technology in the field, upgrading training is considered crucial.

Relationship to Industry

Kirkwood also remains receptive to active and passive roles in continuing education for the implement industry.

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Postsecondary Instruction — Agricultural Mechanics Education at Kirkwood

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A good example of this flexibility occurred recently when the Melroe Company, manufacturers of the Bobcat equipment lines, conducted a four-week training school on skid-steer loaders, using Kirkwood's teaching facilities. Bobcat factory personnel taught the classes and Kirkwood provided the facilities without charge. The college's agricultural mechanics instructors and students enrolled in training sessions, providing Kirkwood with a valuable opportunity to upgrade the quality of its own teaching.

The opening of the agricultural mechanics facility helped to strengthen the relationship of the college with the agribusiness community. It aids in the offering of agricultural mechanics instruction as a core for all agriculture programs at Kirkwood and houses the specialized agricultural mechanics curriculum. Yes, agricultural mechanics is the tie that binds all agriculture programs together at Kirkwood.

THEME

What Research Has to Say — Attitudes Toward Experiential Programs

By Duane W. Kruckenberg and David L. Williams

Editor's Note: Mr. Kruckenberg is an instructor at Ellsworth Community College in Iowa Falls, Iowa. He previously taught vocational agriculture at Iowa Falls High School. Dr. Williams is Theme Editor for this issue of the magazine and Professor of Agricultural Education at Iowa State University.

The high school vocational agriculture department at Iowa Falls, Iowa, has a long history of providing off-farm employment experiences for its students. As early as the 1930's Clarence Bundy, a former instructor at Iowa Falls, had students involved in agribusiness employment experiences. Beginning in the 1960's the cooperative vocational education method was utilized to provide experiential learning for vocational agriculture seniors on a more formalized basis. At Iowa Falls, the term, *Agricultural Occupational Employment Experience (AOEE)*, is used to describe the offering that combines related in-school instruction with supervised employment experience in agribusiness work settings.

The Study

Since the Iowa Falls High School had a long-time involvement with cooperative vocational education in agriculture, it was selected as the site for research that focused on the attitudes of program participants toward AOEE. The five groups of program participants included in the research were (1) former AOEE students, (2) current AOEE students, (3) AOEE employers, (4) parents of former and current AOEE students, and (5) the Iowa Falls High School faculty. Individuals within these groups were asked to respond to general questions and to 46 statements describing aspects of the AOEE program using a 5-point scale that ranged from 1 = strongly disagree to 5 = strongly agree.

Findings

Some of the general findings related to the AOEE program are:

1) 100 percent of the employers felt AOEE was beneficial to their business.
2) 100 percent of the employers said they would be interested in employing AOEE students in the future.
3) 89 percent of the faculty said AOEE should be maintained at its present scope or expanded.
4) 96 percent of the faculty did not feel that AOEE disrupted "normal operations" of the school.
5) 60 percent of the former AOEE students were employed in agricultural occupations; an additional percent were continuing their education beyond high school.
6) 100 percent of the former AOEE students were happy with their AOEE experiences.
7) 71 percent of the parents of AOEE students were former vocational agriculture students; 100 percent said they were happy with the program.

When all five groups of respondents were considered as a total group, 12 of the 48 attitude items had means of 4 (agree) or higher on a five-point scale. These items were:

1) Students need to do a variety of tasks to achieve a good experience on the job.
2) Classroom work should teach students skills they may use on the job.
3) School-released time should be allowed for AOEE work experience.
4) Employers should explain the duties fully to students to avoid misunderstanding.
5) Employers should have a voice in selecting students that are placed in their business.
6) High school credit should be given for AOEE.
7) Good work habits should be learned from a training station as a result of the student's employment.
8) AOEE students should not be given more than their share of "dirty jobs" at the employment site.
9) AOEE should not interfere with a student's plans to attend a college, university, or area vocational school.
10) It is good public relations for the school and the business to cooperate in the AOEE program.
11) Employers should evaluate the progress of students on a regular basis.
12) Employers should communicate with students regarding their progress.

These 12 statements suggest operating principles for a sound cooperative vocational education program in agriculture. Also emphasized were the important roles played by employers and students in conducting the experiential program.

When the five groups were considered separately, employers assigned highest ratings to the following five items:

1) Employer should explain the duties of students fully to avoid misunderstandings.
2) Students need to do a variety of tasks to achieve a good experience on the job.
3) Employers should have a voice in selection of the students placed in their businesses.
4) High school credit should be given for AOEE.
5) Classroom work should teach the skills students may use on the job.

Employers recognize their participation in the cooperative education program as important. Their responses indicated that they expected to be involved in the educational process and that they also expected the school to do its part.

Faculty members assigned highest ratings to the following:

1) Employer should explain the student's duties fully to avoid misunderstandings.
2) Parents should be kept informed of their son's/daughter's progress.
3) Good work habits should be learned from a training station as a result of employment.
4) Employers should communicate with students about their job progress on a regular basis.
5) Employers should evaluate the progress of students on a regular basis.

The faculty had strong expectations of the employer, especially in the areas of student progress assessment, communication, and evaluation. The faculty also expected specific learning outcomes from the student work experience.

Former AOEE students rated the following items the highest:

1) Employers should explain the duties of students fully to avoid misunderstandings.
2) Students need to do a variety of tasks to achieve a good experience on the job.
3) Employers should evaluate the progress of students on a regular basis.
4) Good work habits should be learned from a training station as a result of employment.
5) I would recommend the AOEE program to future potential students.

Current AOEE students assigned the highest ratings to the following items:

1) School-released time should be given to the students for work experience.
2) Students on placement should be paid a fair wage for their work.
3) Parents should not interfere with the student-employer relationship.
4) Ninety percent of the knowledge gained in the area of placement during the school year should be gained on the job rather than in the classroom.
5) High school credit should be given for AOEE.

Even though the listings by former and current students differ, there appears to be a general concern for proper structure of the program and a belief that the program has a true vocational education thrust.

Parents assigned the highest ratings to the following items:

1) Employer should communicate with students about their job progress on a regular basis.
2) Students need to do a variety of tasks to achieve a good experience on the job.
3) Employers should explain the duties of students fully to avoid misunderstandings.
4) Students should be an economic asset to the employer to justify their employment.
5) Employers should have a voice in selecting students placed in their businesses.

Parent's attitudes toward the program emphasize the important roles employers and students performed in the AOEE program. The five items listed for the parents stress the need for good employer-employee relationships in a cooperative education program.

An Important Part of Vo-Ag

The study of the AOEE program at Iowa Falls revealed that the program was recognized as an important component of the vocational agriculture program. Participants had specific expectations of the program. To meet these expectations, the program must be structured following cooperative vocational education principles.

Educational practices that involve the community in providing vocational education learning sites requires the participation and understanding of many groups, including the students, the faculty, the employers, and the parents. The attitudes of these groups toward the AOEE program at Iowa Falls High School may suggest policy issues and provide guidelines that can be useful as other schools initiate experiential education programs that involve students in work environments.

ARTICLE

How an Illinois Community College Program Overcame Limited Funds

By Doris Slocum

Editor's Note: Ms. Slocum is with Belleville Area College at Belleville, Illinois.

Retrenchment and cutbacks are common in discussion on virtually every college campus in the nation; however, in many situations, the community colleges have had to make do with less all along, and many of them have gotten pretty good at innovation and substitution.

At Belleville Area College, Belleville, Illinois, for example, the 120 horticulture students have pitched in and built their own greenhouse. Not only did the experience get a greenhouse for the college, it gave the students experience that will be invaluable when they move into the job market.

The Setting

Belleville Area College is located in the heart of a 1200-square mile district in the western part of Illinois adjacent to St. Louis. The district is a blend of industry and agriculture, with breweries, steel mills, and huge printing complexes, gigantic orchards, grain farms, nurseries, livestock producers, and commercial vegetable farms.

Although the college's agriculture-horticulture program is relatively small compared to some in other Illinois community colleges, it provides training that results in excellent jobs for graduates of the two-year Associate of Applied Science Degree. Charles Giedeman, horticulture instructor, reports that three students were featured last year as assistants to professionals in floral design shows and that several former floral design students have their own businesses and are doing well.

The program is the only two-year program in the several community college districts in that section of the state, and it capstones basic courses offered at Lewis and Clark Community College in Godfrey, Kaskaskia Community College in Centralia, and Rend Lake Community College in Ina, Illinois. Belleville has cooperative agreements with each of these adjacent districts so that horticulture majors can complete their degrees at resident tuition rates. (Illinois is divided into 39 community college districts. Students who attend a community college other than the one in their home district generally are required to pay out-of-district tuition which is twice the cost of resident tuition.)

How the Students Helped

Giedeman, in discussing the students' greenhouse project, explains, "Funds for a greenhouse were just not there. The Board of Trustees did agree to provide gas, electricity, and water. They also paid to have the site graded and leveled, and they gave us funds for the materials."

According to Giedeman, students laid railroad ties and poured 15 yards of concrete which they had mixed by hand for the foundation. They ran the water lines and bent thick wall conduit for arches for the main support. They laid the ground beds and built raised beds for plants. They then did all of the framing of the greenhouse ends and covered them with Fiberglas. Finally, they applied 2 layers of plastic film to complete the basic structure.

Students figured out heating requirements for the greenhouse and installed heaters and thermostats. They put in a pad and fan cooling system and built a head house for storage of pots and other material.

Work began on the greenhouse in the fall of 1977, but an early winter and four months of snow-covered grounds prevented any work at all from being done from Christmas to Easter. More than a hundred students participated in the project, primarily outside regular class hours. Normally, fourteen or fifteen students worked on a specific part of the project at one time. Giedeman notes that there were girls in the program who had never used a hammer before. "They got to be experts," he says. "And we have several guys who have become very proficient wiring."

Class time was used for the project only if there were aspects of it that could into the curriculum. Giedeman points out that the type of greenhouse being erected in industry commonly being erected in industry nowadays. He feels that the experience his students gained will be invaluable to them in future employment. Prior to building the permanent greenhouse, Giedeman's students had constructed a temporary one. On both projects, students sometimes came to work by 6 a.m. and stayed after class until dark.

Program Quality

The quality of the program when placed against the background of limited funds which have been provided, is exceptional The horticulture curriculum at Belleville Area College encompasses floral design, greenhouse management, nursery and landscaping, turf and fruits and vegetables. The college is one of only two or three community colleges in the state that have a comprehensive program in fruit and vegetable culture; this emphasis could possibly be attributed to the large number of orchards located in that area of the state.

The college's 150 acre campus has a nursery area where seedlings are grown. The college has been selected for an All-American display garden for both flowers and vegetables. During the fall of 1979, turf test trials were started with the purpose of evaluating various grasses to see how they perform in that section of the Nation.

Horticulture students have been integrally involved with the inital landscaping of the campus where buildings are in their final stages of completion. In fact, members of the horticulture club, Dutchmen's Breeches, are working to raise money to help with landscaping costs.

ARTICLE

Developing The Affective Domain Through Supervised Occupational Experience

By Karl O. Polson

Editor's Note: Mr. Polson is a graduate student at Virginia Polytechnic Institute and State University and a former teacher of vocational agriculture in New Hampshire.

Supervised occupational experience (S.O.E.) has been recognized as an important component of vocational agriculture programs for many years. Through the development and implementation of experience programs, vocational agriculture teachers have the opportunity to extend instruction beyond the walls of the school. SOE provides opportunities for students to apply, in realistic situations, the technical skills taught in vocational agriculture classes. SOE also provides opportunities to develop skills to a level beyond that which the school is capable of developing. These skills are particularly appropriate to individuals in the attainment of their personal occupational objectives.

Limiting our vision of SOE to the development and enhancement of technical skills is totally inadequate. It is important that we take a closer look at ways and means for using SOE to assist students in acquiring competence in that group of essential job skills which falls in the affective domain.

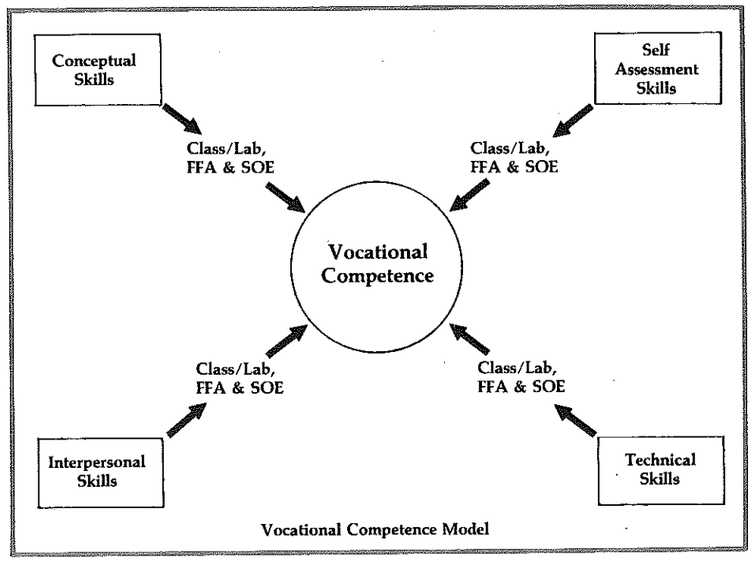
Vocational Competence vs. Technical Competence

The obvious immediate objective of instruction in vocational agriculture is the development of true technical competence in each student so that he or she becomes a productively employed member of the agricultural community. Vocational agriculture programs have traditionally been successful at producing technically skilled individuals, and this will continue to be true in the future. However, it is altogether too easy to lose sight of the fact that technical competence is not the only key to success in the world of work. In fact, technical skills are only one of the components in the development of vocational competence. They are probably the easiest to perceive and develop. Perhaps this is the reason why we concentrate hardest on their development. Technical competence is not enough, however, to accomplish our task. Rather, we must strive to develop vocational competence. Technical skills or competence merely comprise one skill area. Another area is that of affective skills: self-assessment skills, conceptual skills, and interpersonal skills.

Vocational agriculture teachers have a long history of dedication to the development of the total abilities of students through effective use of the three components of a good high school vocational agriculture program: classroom/laboratory instruction, Future Farmers of America, and supervised occupational experience. Each of the components is, by nature, closely related to the others, yet each brings distinct benefits to the program. Among the distinct benefits of SOE is its potential to allow the student to achieve the objectives of classroom/laboratory instruction and FFA participation.

Each component of a vocational agriculture program must contribute to the development of vocational competence as conceptualized in the accompanying diagram. Competence in each of the three affective skills areas, when combined with competence in the technical skills, constitutes vocational competence.

(Continued on Page 18)



Vocational Competence Model

Developing The Affective Domain Through Supervised Occupational Experience

(Continued from Page 17)

Vocational Agriculture Teachers and Affective Skills

Agriculture teachers have worked toward the development of the affective skills for a long time. Development of positive self-concepts in students of vocational agriculture has long been a concern and hallmark of our programs. Good vocational agriculture programs have insured that students were engaged in a challenging program and also experienced a measure of success in classroom/laboratory, FFA, and SOE learning situations. Vocational agriculture teachers have an outstanding record of assisting and encouraging students to recognize and develop the best within themselves. Often this has been a factor in why students have selected vocational agriculture as a course and agriculture as a career.

Further evidence of the concern of vocational agriculture teachers for the development of affective skills is readily available in the form of employer rating sheets used in evaluating the SOE programs of students. Consistently, cooperating employers have been asked to evaluate such things as: attitude toward fellow workers, initiative, dependability, and a long list of other traits. Certainly we recognize that it is important to evaluate these factors. Why then do we seldom include them in our training plans?

Affective skills are considered to be important by employers. In fact, they have been telling vocational educators for years that deficiencies in the affective skills play a far greater role in employee dismissals than do deficiencies in technical skills. Employers have often indicated their preference for employees with well-developed affective skills and poor technical skills to those with poor affective and well-developed technical skills. Those with the greatest chances of job success, however, possess well-developed skills in both areas. It is well to remember that most, if not all, skills in the affective domain have the further benefit of being common to almost all occupations and occupational areas.

Why then do we not focus more closely on these skills in supervised occupational experience programs? Perhaps it is because these skills are among the most difficult to teach. Perhaps we are not often thinking beyond technical job skills, which we never seem to have enough time to teach as it is. Perhaps, too, it is because these are skills which often involve other people as well as self, and we are uncomfortable in what we perceive to be an area which does not concern us.

Send Affective Skills Off To Work

Each of the possible reasons for forgetting or avoiding the affective skills as an instructional area probably has some impact on our neglect of these skills. These skills are indeed among the very hardest to teach. They do not readily lend themselves to the typical classroom or laboratory situation. However, this does not relieve us of the responsibility to deal with them.

A better approach is to get the affective skills out of the classroom and off to work. We may not be able to effectively teach affective skills, but, with careful thought, we can certainly help students learn or improve skills in these areas. Through regular practice in the SOE program (the place where they will perhaps make the greatest difference), these skills can become a part of any student's job skills.

Prior to attempting to develop affective skills, we must be able to identify them. A partial list is included in Table 1. Results of a national survey conducted by PREP, Inc., of Trenton, New Jersey, and of the 1975 Texas Statewide Employer Survey [illegible] employers identified these [illegible] skills as being among the most [illegible] tant skills and attitudes they [illegible] when hiring, firing, and promo[illegible] ployees. Further, the employ[illegible] lieved these skills needed the [illegible] provement. The list is not [illegible] be more than a brief reference [illegible] no means comprehensive but [illegible] may be of assistance in deve[illegible] more comprehensive list.

Next, let us assume that our [illegible] are preparing to begin their [illegible] occupational experience program[illegible] that the teacher is assisting with [illegible] opment of the training plan. A [illegible] ative assessment between [illegible] teacher, and employer is undertak[illegible] determine what skills are needed [illegible] job. These identified skills, less [illegible] student has already developed, [illegible] enumerated in the training plan. [illegible] not neglect at this point to assess the [illegible] fective skills needed on the job. Th[illegible] the time to incorporate them [illegible] training plan.

Involve the student in the pro[illegible] Do not exclusively make the de[illegible] on affective (or technical) skills [illegible] included in the training plan. If the [illegible] dent cannot see the value or [illegible] tance of a skill, question its mer[illegible] member also that the training pl[illegible] open ended and may be added [illegible] any time as a need develops or [illegible] comes apparent. After a brief perio[illegible] time at the training station and inte[illegible] tion with co-workers and supervi[illegible] the ideas students have about the [illegible] which are valuable in determining [illegible] success will likely change.

Evaluate, with the supervisor, [illegible] performance of students on the ba[illegible] their training plans and the pro[illegible]

Table 1
Selected List of Important
Affective Skills as Identified by Employers

Interpersonal Skills	Conceptual Skills	Self-Assessment Skills
Attitude to company	Concern for productivity	Pride in work
Communication	Responsibility and follow thru	Ambition and motivation
Attitude to employer	Solves problems	Disposition
Integrity	Work habits	Dependability
Cooperation	Follows instructions	Persistent
Reaction to mistakes	Time management	Attentive
Reaction to co-workers	Time conformity	Initiative
Supportive	Concern for detail	Responsibility
Courteous	Common sense	Identifies own strengths and weaknesses
	Adapts	Understands

[illegible] made toward the accom[illegible] plishment of its goals in skill develop[illegible] ment. Also, the student should have an [illegible] opportunity to react to the evaluation [illegible] process.

[illegible] evaluate the training plan at reg[illegible] intervals, with all concerned par[illegible] ties cooperating, to determine if [illegible] changes are needed. Consider the regu[illegible] lar evaluations as a part of the back[illegible] ground for the training plan re-evalua[illegible] tion, paying particular attention to the [illegible] personal strengths and weaknesses.

[illegible] this process, most students [illegible] will cease to recognize the importance [illegible] of affective skills in their career prepar[illegible] ation and aspirations. It will not be necessary to teach good affective skills, rather, they will be learned as a product of their recognized value by the student.

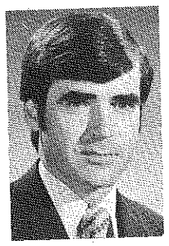
Developing Affective Skills

Good vocational agriculture teachers have been successful in developing sound affective skills in their students since vocational agriculture programs were first established. This should not be a surprise when it is recognized that agriculture teachers have at their disposal two of the finest teaching tools yet devised in the FFA and SOE. It is recognized that each student has technical skill deficiencies and that FFA and SOE activities are used to overcome them. Let us now apply those same procedures to identifying and overcoming the less well recognized affective skills deficiencies. We must begin by identifying the affective skills most in need of our attention and then proceed to build them into SOE training plans, just as we do with the technical skills. We must also show our students, through our own example, that we really do believe that these skills are essential to success.

Let us prove what vocational educators have been claiming for many years: vocational education teaches not only how to earn a living but also how to live.

ARTICLE

Going To School At The Zoo



By Kirby Barrick
Editor's Note: Mr. Barrick is Area Supervisor with the Ohio Agricultural Education Service, Columbus, Ohio.

[illegible] high school juniors and sen[illegible] a day at the Cincinnati, Ohio, [illegible] is a day at school! The students [illegible] are enrolled in a Natural Resources [illegible] Management class, a satellite program [illegible] at the Queen City Vocational Center of [illegible] the Cincinnati Public Schools.

[illegible] its fourth year of operation, the [illegible] Natural Resources Management pro[illegible] gram utilizes the entire 63-acre zoo as a [illegible] giant classroom and laboratory. In[illegible] struction centers around animal [illegible] management and horticulture. The [illegible] huge animal collection and spacious [illegible] grounds of the zoo are used for on-the-[illegible] job vocational training.

How the Cincinnati Program Operates

[illegible] its beginning in 1975, the uni[illegible] que program has encompassed the fol[illegible] lowing areas of vocational study: wild[illegible] life management, veterinary and re[illegible] search lab assistance, large animal [illegible] care, pet shop, kennels, zoology, plant [illegible] propagation, turf and landscape main[illegible] tenance, food plants for wildlife, and [illegible] tree and plant identification.

[illegible] day for the students consists of [illegible] four and one-half hours of related and [illegible] laboratory work in some area of the [illegible] zoo. During the three-hour lab, stu[illegible] dents are assigned to various work lo[illegible] cations under the guidance of the in[illegible] structors and a zoo keeper. Assignments change every two weeks so that all students gain a wide range of experiences. Students specialize in a chosen field during their senior year.

At the end of each assignment period, student performance is evaluated by the zoo keeper who supervised the work. The keeper rates the employability of the students in areas such as quality of work, personal fitness, initiative, dependability, cooperation, interest in work, and attendance.

Natural Resources Management students at the Cincinnati Zoo receive training provided by zoo keepers in the lion house, veldt, commissary, nocturnal house, bird house, and aquarium. Students in the program have full responsibility for the Children's Zoo. Environmental interpretation is taught by the Zoo's education department, and students even accompany the curator on his daily rounds.

The basic philosophy of the two-year program is that one cannot study animal life outside its environment. Therefore, students are required to study both animal science and care and horticulture and landscaping. Work with the zoo's garden crew and horticulturalists rounds out the technical instruction.

Students receive instruction in English, American history, and government at the zoo site. The instruction is provided by a teacher from the Cincinnati Schools. This instruction is necessary in order for the students to complete state graduation requirements.

In addition to technical training in all aspects of the zoo, the students are members of the FFA and participate in a variety of FFA activities. The students also act as counselors for at least one week each year at Camp Joy, the Joy Resident Education Center, in Clarksville, Ohio.

Graduates of Cincinnati's Natural Resources Management program can enter the job field immediately or go on to college or technical school. Students have been placed in pet shops and garden stores. Several have obtained full time jobs with the zoo. Lion Country Safari in nearby Kings Island also provides employment opportunities. Over one-third of the graduates have entered two- and four-year colleges to further

(Continued on Page 21)

TEACHING TIPS

Making Agribusiness Instruction Practic

One of the major concerns of agribusiness teachers is how to make agribusiness instruction practical in its application. How can students receive the same hands-on experience that is commonly used when teaching soil testing or welding? Theoretically, a model business with a building equipped with office machines, file cabinets, and other aids would be nice. In reality, our resources are usually limited to an office, a classroom, and a modest collection of teaching aids. Recent budget cuts have further limited the number and kinds of references and aids at our disposal.

The question is: How do I teach agribusiness concepts using practical, hands-on experiences? For some topical areas this can be pretty tough to do, but in most cases practical application can be used, even with limited resources. As a teacher of agribusiness I would like to share with you some teaching methods which have worked well for me.

By Martin K. Auville

Editor's Note: Mr. Auville is currently teaching agribusiness at Ft. Defiance High School, Ft. Defiance, Virginia.

Teaching Contracts

Contracts are vital to doing business. Instruction in the kinds and uses of contracts needs to be included in the agribusiness program. Several approaches can be used to teach the principles of using contracts. If your FFA chapter has an animal chain, you have a great opportunity to add practical application to this instructional unit. Use agribusiness students to construct an agreement between the student receiving the animal and the FFA chapter. Students can be taught the components of legal contracts while at the same time becoming actively involved in their preparation.

Here's another idea. If your laboratory program includes reconditioning farm equipment for resale, use this opportunity to teach basic business skills such as writing sales slips, using warrantees, and buyer-seller obligations. Recently a fire-damaged tractor was donated to our agricultural machinery service class by a local machinery dealer. It was considered a total loss because the amount of labor required for its renovation exceeded its market value. After using the tractor for laboratory instruction on renovating farm machinery, it was sold to the school on an installment plan. The agribusiness class was given the responsibility for designing an installment contract for the sale of the tractor. A local machinery dealer spoke to the class on the essentials of purchase contracts. After reviewing the installment contracts of various machinery dealers, the class prepared an installment contract for the sale of the renovated tractor. A local lawyer then reviewed the contract with the class. Students learned much about the legalities of contracts in the process of re-selling the tractor to the school district.

Teaching Credit

Teaching units on credit can be accomplished with hands-on experience by establishing a member loan program within the FFA chapter. Agribusiness classes can design financial statements, process loan applications, and interview prospective loan applicants. Using this process, students learn the kinds of information needed to obtain a loan, how to calculate interest rates, how to evaluate the payback potential of an applicant, and the types of questions asked in loan interviews. A local banker could speak to the class about the process of obtaining credit before the class undertakes the project. This learning experience also benefits the FFA chapter.

Teaching Selling

An agribusiness instructor can also use hands-on experience to teach agricultural selling. After discussing the basic concepts of selling, have students make an in-class sales presentation. Students begin by choosing some agricultural product, piece of equipment, or service that they are interested in researching. Ask them to visit a [illegible] in the community that [illegible] sales topic to learn about the [illegible] its operation, and the product's [illegible] vice that it provides. At the same [illegible] students can gather information [illegible] aids to assist in making their [illegible] sentation. This has been a very [illegible] ful activity for my classes. [illegible] sentations are well researched and [illegible] ed with a variety of aids such [illegible] models, charts, samples, [illegible] promotional pens, and caps. [illegible] not only learn the basics of [illegible] ship but become acquainted with [illegible] cultural businesses in the community.

Teaching Advertising

Units on agricultural advertising [illegible] be accomplished in a fashion similar [illegible] selling. One approach is to have [illegible] dents design an advertising program [illegible] for a local agricultural business. [illegible] includes selection of advertising media [illegible] and other forms of promotion. [illegible] dents are asked to submit an advertising [illegible] ing budget for their program. They [illegible] also design a full page advertisement [illegible] out for their agricultural products or [illegible] service. Finally, students write and [illegible] cord a thirty-second radio spot to [illegible] vertise their product or service. After [illegible] the radio spots are taped they are [illegible] viewed and discussed by the entire [illegible] class. Students seem to take particular [illegible] interest in the radio spots, and usually [illegible] a remarkable job in this area.

Teaching Management

Personnel management can be [illegible] taught quite effectively with a role-playing method. Students could volunteer to role-play real life situations that [illegible] are common in the world of work. Students learn how to tactfully [illegible] workers, correct workers, [illegible] workers, or lay off workers. After playing each situation, the class will review what was said and done. [illegible] make suggestions of how the [illegible] manager and the employee could improve. Students can do an excellent [illegible] of role-playing the different [illegible] allowed to research and practice their parts.

Other specific skills lend themselves to practical application in the agribusiness instructional program. Interviewing for jobs is easily taught in this manner, as is merchandising and telephone etiquette. Use your own imagination!

These Worked For Me

In summary, these are some approaches which have worked well for me in teaching agribusiness concepts. Keep in mind that certain agribusiness topics can become boring if students are not actively involved in the learning process. The practical application approach can make the difference between a successful and unsuccessful learning experience. If you teach an agribusiness class try some of these ideas and see how they work for you. Agribusiness instruction can include a variety of practical experiences.

IDEAS UNLIMITED

It's The Freshman "Grab-Bag!"

By David Reese

Editor's Note: Mr. Reese is teacher of vocational agriculture in Evansville, Indiana. This article is based on his entry in the Ideas Unlimited Contest sponsored by the National Vocational Agriculture Teachers Association.

As agriculture teacher must have a quick and easy way of informing incoming freshman students about the FFA. This is one of the summer activities that keeps me very busy. With a program growing in numbers and expanding in offerings, new and active recruitment is a must. The freshman grab-bag is the answer!

Visiting the freshmen (rising ninth graders) is made easier by using the freshman grab-bag. Its contents are discussed with each student and his/her parents. The grab-bag is then left with the student for further study. The grab-bag I use can be put together for less than 50¢ per student, yet it holds a wealth of information.

The grab-bag is prepared by using a booklet obtained from the National FFA Supply Service.

The grab-bag provides the advisor with a hands-on tool for the student and parents to study. Using the grab-bag shortens visitation time and allows the advisor to introduce the FFA in an easy manner. In Indiana, we have FFA camp for freshman. The grab-bag helps explain this and many other FFA activities. The grab-bag also helps to explain the vocational agribusiness program, discuss future plans of the students, and strengthen the bond between teacher, student, and parents.

A vocational agribusiness teacher can use the freshman grab-bag to be more efficient in his/her program and, at the same time, stimulate the interest of freshmen who have enrolled in the agribusiness program.

ITEM	PURPOSE	SOURCE
[illegible] FFA Pencil	Used to write down information during the visit	National FFA Supply Service
[illegible] for a Future [illegible]	To stimulate career planning	Purdue University
[illegible] Freshman List	Lets students know who their classmates are	High School Counselor
[illegible] List	Lets students know who is in the FFA already	Program of Activities
[illegible] of Events	Lists the club activities	Program of Activities
[illegible] Brochure	Promotes discussion of camp	Indiana FFA Association
[illegible] a FFA? Brochure	Explains about the FFA	National FFA Supply Service
[illegible] Stuffer	Explains about Vo-Ag and the FFA	National FFA Supply Service
[illegible] Sticker	Publicizes the FFA	National FFA Supply Service

Going to School at the Zoo

(Continued from Page 19)

their education.

Facilities for the Natural Resources Management program were completed in 1977, adjacent to the zoo's newly-constructed Education Center. Funds for the $185,000 structure were provided by the state, with supplemental funding from the Cincinnati Schools. Land for the vocational wing is leased from the zoo.

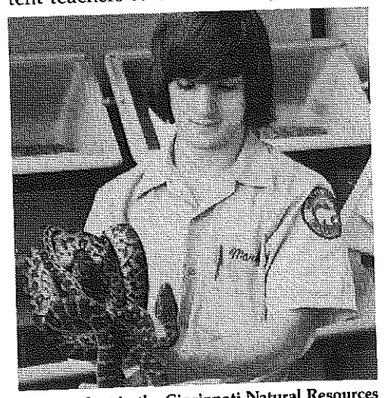
A Similar Program in Toledo

A similar program in Animal Production and Management is in operation at the Toledo, Ohio, Zoo under the leadership of the Toledo City Schools. In its fifth year of operation, the program prepares students for employment as veterinarian assistants, in working with laboratory animals, or in a kennel, stable, pet shop, or zoo.

In the Toledo program, students spend three hours a day at the zoo, and the remainder of the day at the home high school taking required courses. The 54 students enrolled in the zoo program gain first-hand knowledge as they rotate working with the zoo keepers.

Cooperation: The Key

Many of the vocational programs in Ohio have been developed through the implementation of innovative programs such as these. In both zoo programs the full cooperation of the Board of Education, the city, and the zoo board of trustees was needed to provide physical facilities and equipment, courses of study, students, and competent teachers to conduct the programs.



This student in the Cincinnati Natural Resources Management class is learning how to handle a Haitian Boa in the reptile house. The snake is removed for cleaning its cage.

THE FFA AND YOU, **by Bender, R.E., et al.,; The Interstate Printers and Publishers, Danville, Illinois, 1979, $12.95.**

This book is an in-depth study of how the Future Farmers of American may be invaluable as a teaching aid in vocational agriculture. Topics are covered which can benefit any FFA member and chapter: purposes of the FFA, selecting and training FFA officers, developing a chapter program, securing experience in agriculture, developing leadership, cooperation with others, serving the community, improving scholarship, having fun through social and recreational activities, financing the chapter program, conduction of meetings and special activities, you and your public, strengthening the FFA program through alumni, carrying out your chapter's program, using correct parliamentary procedure, making effective use of committees, from Greenhand to American FFA Degree, developing and using a constitution and by-laws, understanding your state and national organizations, assessing our progress, and history of the FFA.

The third edition has up-to-date revisions with timely emphasis on career development, establishing FFA Alumni, Building Our American Communities, girls in FFA, FFA in urban school, agribusiness programs, new Foundation awards in agriculture-related areas, and the Food for America program. Although all pictures are in black-and-white, many are timely, such as President Carter receiving the Honorary American Farmer Degree, modern Supervised Occupational Experience Programs, and organizing citrus fruit as a financial cooperative activity. Advice accumulated over many years of experience is included for students and adults to learn more about the FFA and themselves.

Discussion of this text could engage an FFA member to get the best of his vocational agriculture training. Most topics are adaptable for all year students. However, the wordy sentences and paragraphs typed in considerably small deems the book best suitable for chapter officers, committee chairpersons public speakers seeking FFA materials and other talented students. This would make a handy reference for FFA members and an excellent book for all FFA advisors. College credit for training agricultural education college graduates as prospective FFA advisors could be given if time spent on the topics in **The FFA and You.**

Carl Rexrode, Instructor
Agricultural Education
John Wayland School
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22812

INTRODUCTORY HORTICULTURE, **by H. Edward Reiley and Carroll L. Shry, Jr., Albany, New York: Delmar Publishers, 1979, 556 pp., $15.00.**

Reiley and Shry have assembled an attractive, comprehensive basic text in horticulture for initial first year programs. The format includes objectives and competencies to be developed preceding each unit, student activities, and self-evaluation questions end each unit. A pre-test and post-test are provided in the Instructor's Guide along with answers to self-evaluations, demonstrations, and additional student activities.

The text includes 12 sections containing a total of 44 units on specific horticultural topics. Basic horticultural principles, ornamental horticulture practices, and vegetable and small fruit gardening are emphasized. An attempt has been made to organize several topics to fit the seasons of the academic year.

The subject matter content is appropriate and presented in a most effective manner. Illustrations, photos, charts and diagrams are used extensively to clarify and expand the concepts and techniques presented in the text. New or complex terms are explained when they appear. A glossary is also provided at the end of the text. Titles and indenting facilitate readability.

The treatment of the subject matter has a definite vocational thrust. The first section is devoted to career exploration and includes a job analysis chart and numerous job descriptions. Many of the student activities should lead to the beginnings of supervised occupational experience programs for horticulture students. These should develop basic competencies that are needed for employment in the field of horticulture.

It is obvious that this text was written by two agricultural educators with M.S. degrees who are intimately aware of what is needed and what will be effective with secondary school youngsters. Reiley and Shry are both qualified and their text is teachable, a happy balance of theory and practical application.

William G. Smith
Cook College,
Rutgers University
New Brunswick, New Jersey

THE DOMESTIC RABBIT, **by J.C. Sandford. New York: John Wiley & Sons, 1979, Third Edition, 258 pp., $14.95.**

For the individual who is looking for information about rabbit production, this book is adequate for both basic and advanced information. The information concerns breeds, genetics, nutrition, management, and health. Some effort is made to explain available markets, research, and the rabbit fancy, or showing of domestic rabbits. The book, while being well written, is filled with information which is peculiar to the rabbit situation in Great Britain. Information relative to the United States is often misleading and inaccurate. A case in point is the discussion about the U.S.D.A rabbit research station in Fontana, California. The author mentions the good work that is being accomplished there, but fails to mention that it was shut down in 1968. The strength of this book lies in the basic knowledge, which is applicable in any country or situation. The breeds listed are those recognized in England. While many are also present in the U.S., there are a few American breeds which are covered. The current information on management is adequate for the hobbyist and part-time producer, but commercial systems of the modern variety in America are past the levels mentioned, and a different approach to processing and marketing is used.

How the Walnut, Iowa, FFA Chapter Helped . . .

BY WARREN WINTERHOF
Editor's Note: Mr. Winterhof is Principal of Walnut Community School, Walnut, Iowa.

A Leadership Workshop For Class Officers

How can class meetings be improved? I am sure all administrators have asked this question. If your school is like Walnut Community School, class meetings can indeed be a problem. Many times they are planned at the last minute. The topics to be discussed are presented to the class and officers at the meeting. The class president stands in front of the class and opens the meeting, and before the class begins discussion of the second topic, the president has lost control of the meeting. Why are class meetings usually conducted in this manner? Is there an inherent problem with class meetings or could they be improved?

I am sure as administrators think about the problem, we would agree that with planning and organization, class meetings could indeed be improved. But how is this to be accomplished? Is planning and organization of the meeting enough? It was decided that if class meetings were really to improve the leadership quality of the presiding officers, their knowledge of parliamentary procedure must be improved.

Examining the possible alternatives to this problem, I decided to ask Neal Smith, our Vocational Agriculture Instructor, if he had any suggestions on how class meetings could be improved. I knew Mr. Smith taught parliamentary procedure to his sophomore vocational agriculture class and that qualities of leadership were discussed and stressed in all vocational agriculture classes and in the Future Farmers of America. After some discussion with Mr. Smith, it was agreed that if class meetings were to be improved the class officers would need training and guidance in leadership activities and parliamentary procedure. Mr. Smith also suggested that the local FFA chapter be responsible for conducting a workshop of leadership activities and parliamentary procedure. Contemplating the offer, it was decided to try this procedure if the FFA members would agree.

When Mr. Smith presented the idea of leadership workshop conducted by the FFA for class officers for the basic purpose of improving class meetings, it was received with enthusiasm. Not only would our objectives of improving class meetings be met, but the students would have responsibility for the program.

The planning and organization of the leadership workshop was done by the FFA. They decided to make presentations and give demonstrations on the principles of leadership, responsibilities of a class officer, and parliamentary procedure techniques. The topics discussed at the workshop were: What is a leader? Why be a leader? Who can be a leader? What does a leader do? How do you learn to lead? The FFA used role playing and gave special demonstrations to cover parliamentary procedure. Time was also allowed for the class officers to practice parliamentary procedure techniques.

Following the workshop, the FFA also agreed to demonstrate parliamentary procedure techniques to each class before the next class meeting. This was a good idea. It meant that each class knew about the procedures, which made it easier for the class president to initiate these rules at the next class meeting.

Have class meetings been improved? The class sponsors and student body would agree that they have been improved. The class officers would also agree. Knowing what to do in planning, organizing, and carrying out meetings has helped make these officers better leaders.

THE DOMESTIC RABBIT

J.C. Sandford is well recognized in America as well as Great Britain as an authority on domestic rabbits. He has been chairman of the British Rabbit Council, and is the founder of the Commercial Rabbit Association.

This book is printed in large type and is written on a level which can be used easily by laymen. The illustrations are numerous and well done. The book can be of interest to anyone who wants basic information. The value of it as a text in America is doubtful. There is, as was said before, just too much Britifsh orientation for the book to be accptable as an overall text. It is the most current compilation of rabbit information available to the rabbit producer in nutrition, genetics, and reproduction and breeding, and as such can be recommended as a reference for the rabbit producer.

Stephen Roush
V.P.I. & S.U.
Blacksburg, Virginia

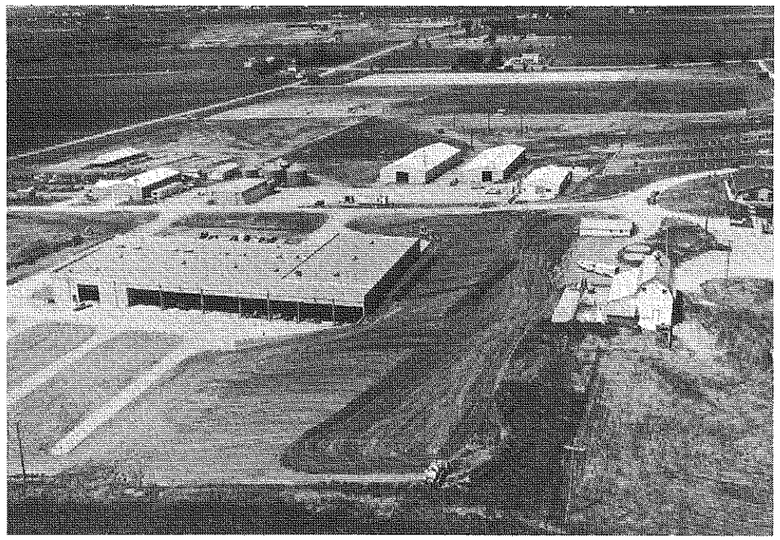
Planning Underway For National Conference

Planning for the National Conference for Agricultural Education is well underway, according to Byron F. Rawls, Education Program Specialist for Agriculture, Agribusiness, and Natural Resources with the U.S. Office of Education.

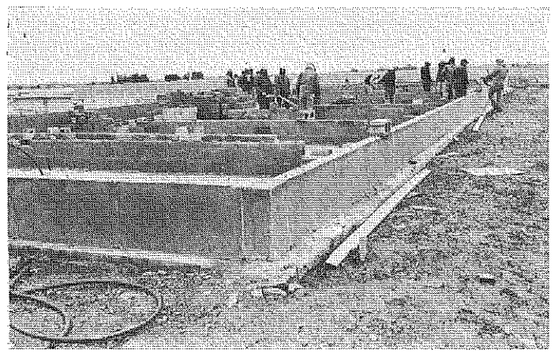
The Conference is scheduled for July 15-17, 1980, at the Continental Hotel in Kansas City.

Stories in Pictures: Experiential Programs

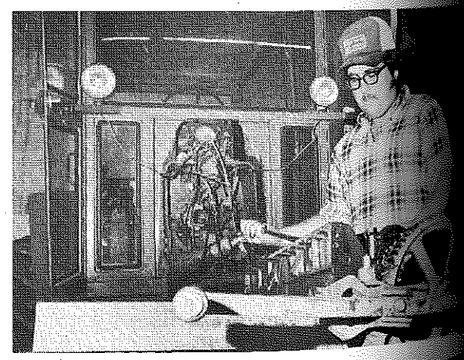
Various approaches are used in providing experiential programs. The Story in Pictur
from Kirkwood Community College in Cedar Rapids, Iowa.



The photo at the left is an
view of the farm labora
Kirkwood. The facilities
laboratories in farm mec
agricultural sales and
horse husbandry, animal
management, rural buildi
struction, production agri
and marine/small engine

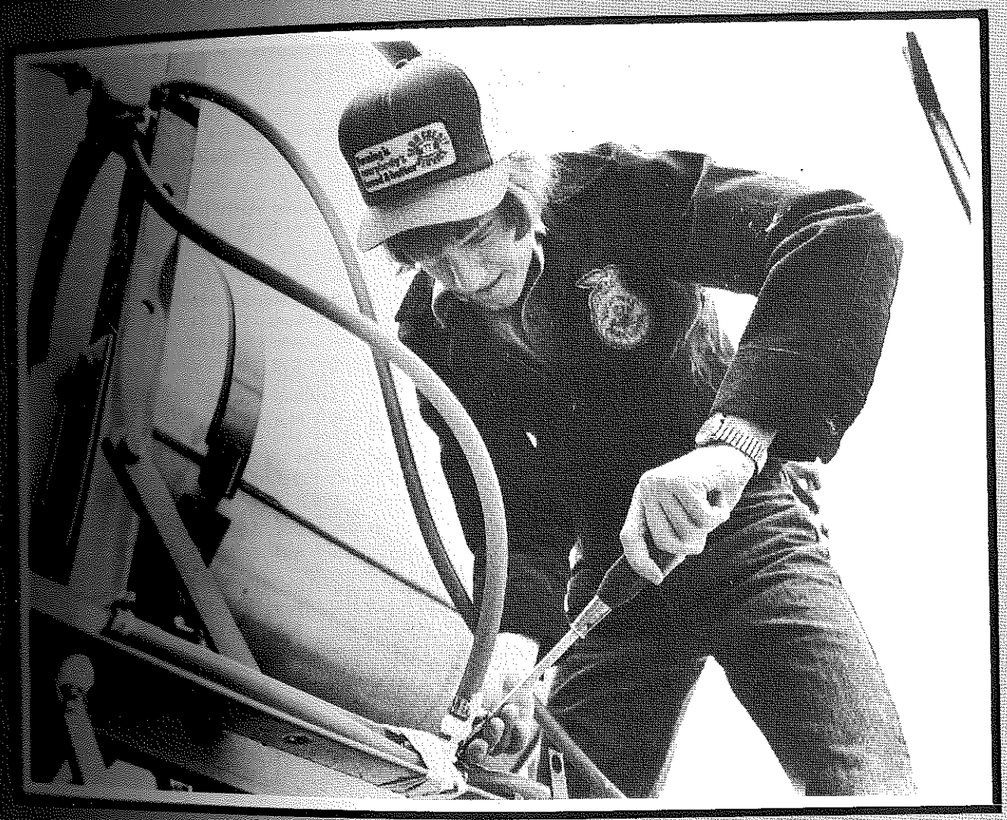


The rural building construction program contracts with area farmers for farm building projects. Here the students are shown completing concrete work on a large hog confinement facility.



Students in the agricultural mechanics program are
ed opportunity for hands-on experience in farm
repair. (All photographs courtesy of the Kirkwood
Service, Cedar Rapids, Iowa.)

The Agricultural Education Magazine



THEME: Summer Programs