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. Glenn Lewis, retired State Supervisor in Maryland, shown receiving a Certificate of Merit Award in agriculture from Robert L. Glickstein, Chancellor of the University of Maryland. The presentation was made during an Agricultural Forum held at the University. (Photo courtesy of the University of Maryland.)

2. Honorary Life Membership in the National Young Agricultural Teachers' Association is granted to six individuals who have made outstanding contributions to the profession. Recent honorary life include (left to right): Robert L. Kelley, Idaho; Ralph W. Edwards, Idaho; and Floyd J. Denton, San Diego, Calif. (Photo courtesy of NVATA.)

3. Ray Wiegand (left) of Evansville, Wisconsin, being presented with the NVATA Agricultural Education Recognition Award by F.J. Koebrich, Director of the Marketing Services for Pizer Agriculture Division. The award was presented because Mr. Wiegand is a National FFA Swine Production Proficiency winner. (Photo courtesy of NVATA.)

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

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 39 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. The findings are very similar to national study about whether a 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 is it 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 scope 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, school administrators, and other individuals with responsibility for vo-ag about SOE. We need to conduct pilot programs to seek new ways of providing experiential programs.

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Experiential Programs Can Help Answer The Big Question
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The Cover
Experiential programs are a major component of vocational agriculture, and as such, they are integral to the success of any agricultural education program. This issue of the journal focuses on the role of experiential learning in agricultural education.

May, 1980
This issue of the Magazine focuses on experiential programs, written by David L. Williams of Ohio State University. As managing editor, has worked with a team of authors to obtain a variety of articles on experiential programs. The articles are practice-oriented, while others are research-oriented.

The Theme
The theme of this issue is "Agricultural Production Experiences at School For The Urban Student." 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 was focused on farming, and the students were required to have some type of agricultural production supervised occupational experience (SOE). With the Vocational Education Act of 1963 and the amendments to 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 enrolled in vocational agriculture continued. Also during these past years, girls were allowed to become members of the Future Farmers of America (FFA) and their numbers on vocational agriculture are on the increase.

During this time period, it was quite evident that the number of farmers required to feed this country was decreasing. 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 work off the farm in production agriculture. The urban students could not raise a steer, a hog, or an acre of corn in their backyards. Also students with an agricultural background had a difficult time finding facilities for the types of SOE programs they desired. The staff of the Sycamore High School Vocational Agriculture Department, with the recommendations of the Sycamore Agricultural Committee, decided to make a drastic change in its program in 1971 by allowing all students to pursue a career in agricultural industry. One of the most obvious resultswas maintained, however, was that all students, whether seeking a career in 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 some 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 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 participation, 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 experience. Therefore, the agricultural 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 school in a chapter-owned barn. This program is reserved especially for fresh...
Agricultural Production Experiences
At School For The Urban Student
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man students living in town who wish to work with live-
stock, 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 FFA
to an agri-
business program.
A chain gift program was initiated in 1977 to facilitate
and encourage more student 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 agricul-
ture department renting or purchasing buildings close to
town in order to expand the livestock program into swine
and beef production.

Horticulture Experimental Program
One of the purposes of the Sycamore Vocational Agri-
culture Department is to provide means for students to
develop skills in the commercial production of horticul-
tural 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 prop-
erty 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.

Farming Experimental Program
In 1979, 204 acres of land were rented for the culti-
vation of corn, soybeans, and oats. This land is divided
into different fields in the Sycamore community. All
farmers have been rented. Students operate the entire farming operation, including
planting of crop varieties to plan, planting the
program, and operating the machine shed. Students
work during the farming operation beginning at 3:30 p.m.
when school is out to 10:00 p.m. many nights plus weekends.
The students are involved in many aspects of the farming plan-
ing the crop and overseeing the entire operation;
they are also involved in the maintenance of the
equipment. FFA activities in this program are
setting up a cross-section farm and other activities. Following
the completion of the harvest, the students
learn how to use the equipment and
the maintenance of the machines;
they then receive gain experience in
skilled care for the equipment;
throughout the program, the students
must maintain all equipment. Students
also have an opportunity to
participate in competitive events
throughout the state. The students
also have an opportunity to
participate in competitive events
throughout the county.

This student at Sycamore High School is preparing for the FFA Chapter.

Experiential Learning in Horticulture
The Pulaski Story

By ELSA STEVENS and WYTHE MORRIS
Editor's Note: Ms. Stevens and Mr. Morris are horti-
culture instructors at Pulaski County High School.

Orchard. A small school orchard has been developed for
growing apple seedlings for grafting purposes. During
1979-80, students grafted seedlings 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 experience in many areas of landscaping
and maintenance will be initiated in 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,
watering, fertilizing, pruning, and general maintenance of
the collection. Students will be able to propagate many of the
cover crops. Some of the plants which are
found in this area may be collected from the wild, others
may be acquired from local nurseries. Students will learn
how to use the equipment and
the maintenance of the machines;
they then receive gain experience in
skilled care for the equipment;
throughout the program, the students
must maintain all equipment. Students
also have an opportunity to
participate in competitive events
throughout the county.

In-School Experiences
Greenhouse. The greenhouse affords an opportunity to
start many different crops including hothouse tomatoes,
avocados, strawberries, lettuce, radishes, and many
other vegetables. Through these experiences, students
learn how to propagate plants, mix soil, fertilize,
water, and manage photoperiod. These students are
trained to maintain all phases of the production
- planting and raising of crops to final sales
and marketing. Many of the skills learned in greenhouse
operations can be used as a knowledge base for other
areas taught in the curriculum.

Horticulture. The school farm, approximately 56
acres, is farmed for both educational and horticultural
purposes. The students have been responsible for
all crop and livestock operations. Students have
been involved in several crops including
Christmas trees and ornamental plants. A nursery plot,
located on the farm, has been a center of activity.
This nursery has been the subject of many
students involved in plant production for several years, and
students have experience in not
only plant physiology but also
management techniques. Decisions have been made
regarding the growing species which have become over-
grown or diseased due to improper
planting or transplanting. Also, students
are involved in maintaining the rainwater harvesting system
and in planning and developing equipment for
plants rooted in the greenhouse.

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Experiential Learning in Horticulture —

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Experiential Learning in Horticulture —

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and the effect of increased fertility levels on various plant materials in both the laugh 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 housing spring and fall crops, 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 flower shop experiences. Students use creative skills in designing wedding bouquets, corsages, boutonnieres, and terrariums, and arrange flowers in pots and individuals and are sold during special occasions such as Christmas, Valentine's Day, and Mother's Day. Students keep 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 equipment. In order to do this, students engage in sales and management activities central to their area of study. Students develop product knowledge, skills in working with people, and in using sales and management techniques. In this class, students learn how to greet customers and prepare receipts for their purchases. They develop their selling skills, record and file charge receipts, prepare statements, record sales and purchases, and determine prices and profit margins.

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 seedling and seeding, fertilizing, disease and weed control, dethatching, irrigation, and mowing.

Out-of-School Experiences

Employment. While horticultural businesses are somewhat limited in the Dumas area, students have opportunities for employment experiences each year. Some students have been employed in flower shops where they gain experience in designing, arranging, delivering, and sales activities. Others have found jobs in landscape maintenance and have hired students as part-time or maintenance staff. Students have been employed by local nurseries, garden centers, and landscape contractors. Local department store stores have hired horticulture students to take care of their houseplant and nursery departments. Employment experiences allow students to develop personal and technical 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, spraying, or production enterprises such as beef production, vegetable production, Christmas tree production, students gain experience while learning money for their personal college, or expansion of their small enterprises. Some examples of enterprises that have had success are:

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

Such experiences give students experience in the organization and management of a small business which may never be exposed to anywhere else in their lifetime.

Summary

As in all the areas of agricultural education and community-based experiences, students have the opportunity to gain valuable experience outside the classroom. The Pulaski County vocational horticulture program is designed to provide production opportunities in the discipline of horticulture and to expand horizons through activities in the community. Experiential learning is considered essential for the development of the agriculture student.

Wild Game

Experiential Learning

In Meats and Conservation

By Douglas A. Paul and Eldon H. Betz

Editor's Note: Dr. Paul is currently "Professor of Food and "Department of Agriculture, "University of Idaho. Dr. Betz is an "agricultural education teacher at Meridian, Idaho."

(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 scents glands from the inside and outside of the rear legs. If the substance from the scents glands touches exposed flesh, it will flavor the meat for a long time.

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

(5) Carefully remove the entrails.

(6) Properly transport the game from the field to the campsite and home. A sprayer should be used in the rib cage to allow for quick bleeding. Keep the meat protected while in transport. A clean tarp, game bags, or even an old clean bed sheet work very well. Excessive use of 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 meat.

(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.

Dressing Wild Game

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

- Cutting the rib cage and removing the lungs and liver.
- Removing the heart and organs from the body.
- Trimming the meat and removing any excess fat.

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 (Continued on Page 10)
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 antler and bone, everything is boned and the meat is cut into steaks and roasts. The remaining meat is cut into strips for stew. Students are taught to divide the meat and label the packages correctly. The 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 meats.

One of the difficulties encountered in teaching game meat is the ability to schedule a wild game carcass. Mr. Betz depends on the expertise of himself or his students. Some weeks are designated as "teachable" moments that never appear.

The catch is that most instructors are not where hunting exists, an instructional area for game conservation and meat cutting provides opportunities to capitalize on student interest. It offers a change of guidance to students in following hunting resources wisely, and introducing a unit on meat.

THEME

Agribusiness: The Realistic Learning Center for Postsecondary Students

How do you provide a classroom that can supply the latest equipment, facilities, experiences, problems, and hands-on situations as found in a real agribusiness today? Most educational budgets do not have the dollars necessary to offer such real-life experiences in the classroom. It is not possible to stimulate 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 work experience programs. These programs combine the classroom and field experiences together. The University of Minnesota Technical College, Waseca, offers these experiences for growth through:

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

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, the student obtains experience in 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 future of their choice through work experiences.
2. To allow students to experiment with career goals early enough to alter their life plans before serious times.
3. To encourage students to assume more responsibilities toward their academic preparation.
4. To assist students in seeing the need for class structure as it relates to their occupation.
5. To permit students to work in actual situations that cannot be duplicated in the classroom.
6. To give students the experience of working with equipment which, because of its size or cost, is not available at the college.
7. To enable students to acquire experience in their chosen trade or employer's ship.
8. To allow students the opportunity to develop a sense of responsibility required in the business.
9. To help students learn, through real experiences, values of personal qualities such as neatness, precision, and order, and concern for the clientele for whom they are working.

One of the difficulties encountered in teaching game meat is the inability to schedule a wild game carcass. Mr. Betz depends on the expertise of himself or his students. Some weeks are designated as "teachable" moments.

The catch is that most instructors are not where hunting exists, an instructional area for game conservation and meat cutting provides opportunities to capitalize on student interest. It offers a change of guidance to students in following hunting resources wisely, and introducing a unit on meat.

By: Thomas Lindahl and Peter Eng

Editor's Note: Both authors are at the University of Minnesota Technical College, Waseca. Mr. Lindahl is Chairperson of the Agricultural Business Division, Dr. Eng is Chairperson of Agriculture, Industries and Business.

For those students who need Pre-Occupational Preparation Program (TOP) experience, the TOP program provides an opportunity for students to work in an on-the-job setting before completing their college program.

The TOP program is designed to give students an opportunity to gain hands-on experience in the agribusiness field. It is a structured program that provides students with the necessary skills and knowledge to succeed in the agribusiness industry. TOP students will develop skills in areas such as communication, problem-solving, and decision-making.

TOP students are required to work a minimum of 160 hours in the field each semester. This includes both on-campus and off-campus work experiences. Students are encouraged to seek out opportunities to work with local businesses and organizations that are relevant to their career goals.

TOP students are also required to complete a combination of academic courses and work experience hours. These courses cover topics such as business ethics, finance, and economics.

Throughout their TOP program, students will have the opportunity to network with employers and professionals in the agribusiness field. This will help them gain valuable work experience and make important connections for future employment.

The TOP program is designed to provide students with the skills and knowledge necessary to succeed in the agribusiness industry. By completing the TOP program, students will be well-prepared for future employment and have a competitive advantage in the job market.

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

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provision before the next evaluation. Employer evaluations are conducted in 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 as an initial exploratory learning opportunity in a business. As a result, a need has 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;
2. to develop a well-planned learning environment;
3. to develop additional skills in the student’s chosen career field by providing employment in job areas allied to the initial work experience;
4. to develop added management and or sales skills in an area directly related to future employment;
5. to move from career exploration to career development in the student’s employment program; and
6. to develop job experience and preparation in areas of employment unrelated to previous employment experience.

To further develop the personal qualities of cooperation, customer client relations, and work attitudes, the P00WII program is designed to provide students with only opportunities to experience the further building of financial skills. Students enrolled in POP II are required to work for a minimum of twenty hours of work experience per week for eleven weeks.

Directed Study Experience

Directed studies to obtain experience in business is the third method presently being used in the business program to learn the business major. The major objective is to provide actual student experience for students who are enrolled in the business major. The school is designed to provide actual sales experience for students enrolled in the business major. The sales experience is evaluated before the student graduates.

Greater sales experience has been helpful in developing student’s self-confidence and in developing their confidence in their abilities and interacting with others. It is also helpful in setting goals and evaluating the college. This article describes the student’s experience at the college. This article explains the experiences and training provided by the college, which may involve one of several types of sales experience such as:

1. selling for a local agricultural business in the area;
2. assisting in on-going farm sales programs in agricultural businesses;
3. developing and implementing programs with other agricultural products.

Experience in selling provides students with knowledge of how to handle problems encountered in the workplace. It allows students to interact with customers and develop the skills necessary to succeed in the business environment.

Summary

All of the agricultural business experiences described in this article are significant to the student’s learning in a real-world environment. Although students learn the methods and skills in an actual business environment, they also learn from the traditional classroom setting. This fact emphasizes the importance of these experiences. It also emphasizes the need for a well-rounded education. The programs offered by Kirkwood Community College provide students with opportunities to develop these skills in a variety of settings.

The Kirkwood Program

Kirkwood enrolls more than 400 students in eight agriculture and 9000 students in other programs. Virtually all of the students in the agriculture program are preparing for careers in agriculture. Kirkwood’s production agriculture students spend their entire time working with plants. The program aims to prepare students for careers in agriculture. Kirkwood has a strong emphasis on plants and animals and a heavy focus on practical applications. The agriculture program is also considered the best in the area and the state. The program is designed to provide students with the skills necessary to succeed in the real-world environment.

Kirkwood’s strong emphasis on agriculture makes it the program of choice for students interested in agriculture. Kirkwood’s students are active in the community, participating in various organizations and activities. Kirkwood’s agriculture program is designed to provide students with the skills necessary to succeed in the real-world environment.


THEME

Postsecondary Instruction - Agricultural Mechanics Education at Kirkwood

By Larry Statler and Ed Scherick

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 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 the east central Iowa area 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, 30,000 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 dealerships.

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

Agricultural mechanics instructors are conditioned to deal with more than skill performance. They use the following progression in their teaching: awareness, knowledge, decision making (doing things), and proficiency (doing things quickly 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 farm implement industry. (Continued on Page 14)
THEME

What Research Has to Say — Attitudes Toward Experiential Programs

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 1920's Clarence Bundy, a former instructor at Iowa Falls, had students involved in agriculture 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 setting that combines related in-school instruction with supervised employment experience in agricultural 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 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. 70 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 AOEE disrupted "normal operations" of the school.
5. 60 percent of the former AOEE students were employed in agricultural occupations; an additional 10 percent were continuing their education 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 satisfied with their AOEE experiences.
8. 71 percent of the parents of AOEE students were satisfied with their AOEE experiences.

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 the learning environment and opportunities for personal growth and development are necessary. Iowa Falls High School may suggest policy issues and provide guidelines that can be used by other schools to stimulate experiential education programs that involve students in work environments.
ARTICLE

How an Illinois Community College Program Overcame Limited Funds

Retrenchment and cutbacks are common in discussion 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 been forced to do things differently and build their own greenhouse. Not only did the experience of designing 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 these students have earned last year as assistants to professionals in floral design shops and that several former floral students have taken on their own businesses and are doing well.

The program is the only two-year program in the College of Agriculture offered in the southern Illinois 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 cooperated in 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 had raised $600 to provide a concrete base for the foundation. The foundation was then built on using mix of concrete which had been 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 fiberglass. Finally, they applied two layers of plastic film to the basic structure.

Students figured out heating requirements for the greenhouse and installed heaters and thermostats. They also laid the fan and 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 as winter and four months of 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 good," he says. "And we have several who have become very proficient." (Continued on Page 18)

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 is a student teacher of vocational agriculture in New Hampshire.

Op. 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 the use of effective 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, in 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 skill areas, when combined with competence in the technical skills, constitutes vocational competence.
Developing The Affecive Domain
Through Supervised Occupational Experience

(Continued from Page 17)

Vocational Agriculture Teachers and Affective Skills

Agriculture teachers have worked toward supplanting 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 exerting 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 scoring and rating sheets used in evaluating the SOE programs of students. Consistent cooperation of teachers have been asked to evaluate such things as: attitude toward fellow workers, initiative, dependability, and behavior 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 dissimilation than do deficiencies in technical skills. Employers have often voiced their preference for employees with well-developed affective skills and poor technical skills to those who have technical skills but poor affective 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 their inherent benefit of making up to almost all occupations and educational 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 really thinking beyond technical job skills, which we never seem to have enough time to teach as it is. Perhaps too, it is because these skills are which often involve other people as well as self, and we just do not know how to perceive that there is a place in our programs to consider them.

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 effectually teach affective skills with our careful thought, we can certainly help students learn or improve skills in these areas. Through regular practice in the SOE program (the place where we will perhaps make the greatest differences), 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 1973 Texas Statewide Employers Survey, indicate that employers identified skills as being among important skills and attitude of the students' ability to get along with other employees. Further, the actual scores of these skills as mentioned above may be more than a brief discussion of the main components may be more comprehensive in nature.

Next, let us assume that we are preparing to begin an occupational experience that the teacher is using the clinicians of the interest assessment battery, or any test battery that is used to the college counseling center. These identified skills have already been broken down and not neglect at this point affective skills needed in the time to incorporate the training plan.

Include the student in the discussion of their job. The teachers should be involved in this training plan. Get as much performance as is possible in a satellite program. For example, the Vocational Agricultural Training Center at the University of Wisconsin-Madison in the month of the year will incorporate the Technical Development Program into two areas for classroom and laboratory. The centers center around animal manure and composting. The students are assigned to work on departments and the students have their jobs, which are valuable in developing success will likely change.

Evaluate, with the supervisor of students in their training plans and the students and employees every four weeks.

Table 1

<table>
<thead>
<tr>
<th>Interpersonal Skills</th>
<th>Conceptual Skills</th>
<th>Self-Assessment Skill</th>
</tr>
</thead>
<tbody>
<tr>
<td>Attitude to company</td>
<td>Concern for productivity</td>
<td>Pride in work</td>
</tr>
<tr>
<td>Communication</td>
<td>Responsibility and follow through</td>
<td>Ambition and initiative</td>
</tr>
<tr>
<td>Attitude to employer</td>
<td>Fidelity</td>
<td>Dependability</td>
</tr>
<tr>
<td>Integrity</td>
<td>Work habits</td>
<td>Dependability</td>
</tr>
<tr>
<td>Cooperation</td>
<td>Fidelity</td>
<td>Dependability</td>
</tr>
<tr>
<td>Motivation to work</td>
<td>Time management</td>
<td>Dependability</td>
</tr>
<tr>
<td>Relationship to co-workers</td>
<td>Responsibility</td>
<td>Dependability</td>
</tr>
<tr>
<td>Supportiveness</td>
<td>Common sense</td>
<td>Dependability</td>
</tr>
<tr>
<td>Courtliness</td>
<td>Adapts</td>
<td>Dependability</td>
</tr>
<tr>
<td>Adaptability</td>
<td>Understands</td>
<td>Dependability</td>
</tr>
</tbody>
</table>

Developing Affective Skills

Good vocational agriculture programs have been successful in developing some affective skills in their students since vocational agriculture was first developed. This should not be a surprise when it is recognized that agriculture provides the first training tools yet devised in the FFA and SOE. It is recognized that each student has technical skills 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 that need in our attention and then proceed to build them into SOE training plans, just as we do with the technical skills. We must also move students, through our own example, that we truly do believe that these skills are essential to their development and promotion.

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 Rury Barrick

Editor's Note: Mr. Barrick is Editor of the Super Teacher with the Ohio Agricultural Education Service, Columbus, Ohio.

Natural Resources Management students at the Cincinnati Zoo receive training provided by zoo keepers in animal life outside its environment. Therefore, students are required to study both animal science and care and maintenance of the animals and their habitats.

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 provided with 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 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 County Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with Country Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with Country Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with Country Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with Country Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with Country Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with Country Safari in nearby Kings Island also provides employment opportunities. Over the past two and four years, students have held part-time jobs with
Making Agribusiness Instruction Practical

One of the major concerns of agribusiness teachers is how to make agribusiness instruction practical in its application. How can students relate the same hands-on experience that is commonly used when teaching soil testing or milking? Theoretically, students 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 hands-on equipment. Nevertheless, students can be taught to share the limited equipment and ideas at our disposal.

The question is: How do I teach agribusiness concepts using practical, hands-on experiences? For some teachers 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.

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 the agribusiness students to construct an agreement between the student receiving the animal and the student supplier. 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 recordkeeping and bookkeeping for resale, use this opportunity to teach basic business skills such as writing sales slips, using vouchers, and other obligations. Recently a fire-damaged tractor was donated to our agricultural machinery technology class by a local machinery dealer. It was considered a total loss but because the amount of labor required for its renovation exceeded its market value. After using the tractor to demonstrate agribusiness practice on renovating farming machinery, it was sold to the school on an installment plan. The tractor 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 installment 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 revising the contract to suit 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 a variety of skills needed to obtain a loan, how to calculate interest rates, and 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 on the process of obtaining credit before the class takes up the project. This learning experience also benefits the FFA chapter.

Teaching Selling

An agribusiness instructor can also use hands-on experience to teach agribusiness selling. After discussing the basic concepts of selling, students can 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 start their research in the community the sales topic is located in, in order to develop a deeper understanding of the product. Students can pass their findings to other members in the class for further investigation. The students' knowledge of the subject is then used to prepare a sales presentation. Students are asked to develop an educational approach in order to make their presentation more effective. Because the sales topic is located in the community, the sales topic is something that the students are interested in and thus will be more motivated to learn about it.

Teaching Advertising

Units on advertising can be accomplished in a hands-on way by having students present an advertising campaign. One approach is to design an advertisement for a local agricultural product that includes selection of medium, cost, content, and timing. Students are asked to submit their advertisements to the school district. Each advertisement is then reviewed by the students and feedback is given. The student with the best advertisement for the local agricultural product is chosen as the winner. The winner is then asked to advertise the product in the local newspaper. The student's feedback is also helpful to other students who are working on the same project.

Teaching Cooperative

Cooperation is the key to effective instruction in agribusiness. Many of the vocational programs in Ohio have been developed through the implementation of cooperative programs. In both programs, the students are chosen from the student body and the student body is chosen from the student body. In the case of the vocational program, students are chosen from the class in order to participate in the cooperative program. The cooperative program is then presented to the students by the teacher, who also helps to explain the program. The teacher also helps to explain the program to the parents, who are then asked to join the cooperative program. The teacher then helps to explain the program to the students, who are then asked to join the cooperative program.

Teaching Management

Personal management skills are quite effective in teaching management skills. Students can be taught to apply management skills to the classroom setting. The teacher can serve as a role-model for students. The teacher can serve as a model for students by showing them how to make suggestions for how to improve the classroom management. The teacher can also serve as a role-model for students by showing them how to make suggestions for how to improve the classroom management. The teacher can also serve as a role-model for students by showing them how to make suggestions for how to improve the classroom management. The teacher can also serve as a role-model for students by showing them how to make suggestions for how to improve the classroom management.

Sources:

- National FFA Supply Service
- Purdue University
- High School Counselor
- Program of Activities
- Program of Activities
- Indiana FFA Association
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- National FFA Supply Service
- National FFA Supply Service

This student is a Cincinnati Natural Resources Management student who works in the zoo's reptile house. The snake is removed for cleaning its cage.
How the Walnut, Iowa, FFA Chapter Helped...

By Warren Witterman

Editor's Note: Mr. Witterman is Principal of Walnut Community School, Walnut, Iowa.

Smith, our Vocational Agriculture Instructor, 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 qualifications 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. Complaining of the offering, 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 Threeway and made possible through the cooperation of the principal and the committee members and gave demonstrations on the principles of parliamentary procedures, and the cooperation of the class teacher, responsibilities of a class officer, and parliamentary procedure techniques. The topics discussed at the workshop were: What is a leader? Why be a leader? What can a leader do? How do you learn to lead? The FFA members were able to give the students 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 agree that the meetings have been improved. The class officers also agree. Knowing what to do in planning and carrying out meeting has helped make these officers better leaders.
Stories in Pictures: Experiential Programs

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

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 provided opportunity for hands-on experience in farm equipment repair. (All photographs courtesy of the Kirkwood Agricultural Extension Service, Cedar Rapids, Iowa.)