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Number 9

THEME

SOEP: Cooperative Experience Programs

THE
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Interfacing Vocational Agriculture with Business

By Larry E. Miller, Editor
(Dr. Miller is a Professor in the Department of Agricultural Education at The Ohio State University.)

The writings and discussions relative to vocational education during the past several years have been replete with calls for an increased level of coordination between business/industry and vocational education. One method of answering the call is through cooperative education. Cooperative experience programs not only provide unique opportunities for learning experiences, but also offer peripheral advantages.

Benefits

These advantages accrue to the student, very obviously, but also to the teacher, the administration and the school system. Successful cooperative programs lets others be shareholders in the educational experience of students. The cooperative agencies, schools and business/industry, create an atmosphere of mutual respect and trust. The prestige of both agencies is elevated in the eyes of the community at large and by those directly participating.

The student involved in cooperative SOE programs not only learns technical knowledge and skills but many other benefits. Moore (1976) probably put it best when he stated it is probably the most effective builder of responsibility, dependability, order, initiative, industry and a dozen other sterling values, so hard to find among college graduates, not to mention the labor market and professional sanctums (pp. 322-323).

Given the rapid rate of technological change which exists today, keeping vocational agriculture programs up-to-date becomes a problem. Evans (1971) noted that one of the real advantages of cooperative education is its adaptability to change. When labor market needs change in agricultural business/industry, new facilities and equipment for the school may not be necessary if cooperative SOE programs are used. Not only will the students receive more up-to-date training, but the monetary savings to a school could be considerable.

Conduct of Program

The key to accruing these benefits rests with conducting successful programs as discussed in this issue. Poorly conducted programs can produce negative results as quickly as well conducted programs obtain plaudits. Cooperative programs have many different forms and institutional modes. The various forms and modes should be thoroughly studied to determine which is the best for each teacher and program. Whether you are beginning a program or working with one currently in existence, ideas gleaned from others may help to improve your efforts.

Cooperative education has proven successful with divergent groups and we need not confine our thinking and programs just to the traditional program. Successful programs have been reported in prisons, with special needs students, with disadvantaged students, with gifted students, with dropouts, with post secondary students, with adult students, and with students in higher education.

Summary

Lee (1976) noted that cooperative programs develop specific job skills, enhance interpersonal relationship

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The Research Committee of the Agriculture Education Division, AVA Proudly Issues

This CALL FOR PAPERS to be considered for presentation at the Eleventh Annual NATIONAL AGRICULTURAL EDUCATION RESEARCH MEETING on November 30, 1984, in New Orleans, LA, in conjunction with the American Vocational Association convention.

PAPER PROPOSAL SPECIFICATIONS:

Seven copies of the research summary (not to exceed five pages double spaced) should be submitted for use in determining the final program participants. The summary should include:

A. Objectives of the study
B. Methods
C. Data sources
D. Results and/or conclusions
E. Educational or Scientific Importance of the study
F. Names and Mailing Addresses of the Author(s) on a separate cover page

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development, speed up maturation and provide the opportunity to refine life and career goals. Drawbaugh (1977) noted that such programs help people improve their positions in life. So, the benefits are many.

Education in vocational agriculture will find cooperative SOE programs to be very beneficial. These programs also have problems but the benefits can far outweigh the problems. They offer a unique way of having a very positive effect upon the lives of the students we serve.

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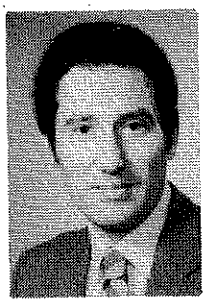
The Cover

Patient and caring on-site supervisors greatly enhance the learning of students. Working with the manager of a farm cooperative, this student learns about sales and handling farm supply products. (Photograph courtesy of Duane Kaas)

THEME

Linking Formal Education to Work

Tell me the kind and quality of supervised occupational experience programs your students have, and I will tell you the kind of teacher of vocational agriculture you are. (Phipps, 1980).



By Robert A. Martin, Theme Editor

(Editor's Note: Dr. Martin is an Assistant Professor in the Department of Agricultural Education, 223 Curtiss Hall, Iowa State University, Ames, Iowa 50011.)

This statement may have more meaning than is initially apparent to the casual observer. Supervised Occupational Experience (SOE) has finally become fashionable again. Agricultural education is on the threshold of exciting and challenging opportunities. The business world is ready and willing to link up with quality educational programs. Cooperative education could be that link. Are we ready?

Cooperative education, while sanctioned as one of the SOE alternatives, often may not be utilized to its fullest potential. Cooperative education is an alternative deserving more attention of educators in agriculture. However, there are some key questions that need answering if cooperative education is to become a viable and working alternative in the SOE package: What is Cooperative Education in vocational agriculture? What is the purpose of cooperative education? Why do we need it and who is responsible for quality cooperative education programs?

Definition

It should be emphasized at the outset that cooperative education is first and foremost an educational program. Perhaps the best definition of cooperative education was developed by Mitchell (1977, p. 286) ". . . a school and community laboratory through which high school students find expression in real job situations for that which they have learned in subject matter (skills) courses. The program simply brings together the student, his/her educational background and occupational opportunity." Cooperative education is a highly structured, developmental educational program; it is not a part-time job experience program.

Purpose

The purpose of cooperative education is to provide the opportunity for high school juniors and seniors to pursue their career goals through work experience in selected jobs in the community and through related instruction in the school. In the final analysis, students will be qualified for beginning employment in their chosen occupations after graduation from high school (Mitchell, 1977).

One of the most important needs of youth is to have the opportunity to attend a school dedicated to preparing them for the next step after high school. The purpose should not reduce emphasis on basic general education or on college preparatory work. Basic general education should be strongly maintained to assure the development of communication, computation and other basic skills essential to successful living in modern society. It necessarily follows that career emphasis in the high school should not curtail the availability of college preparatory courses for those students whose educational plans require college attendance (Mitchell, 1977, p. 3).

The emerging philosophy of public education is that all education that groups the individual with the skill and knowledge needed to enter and make progress in the world of work at any level, skilled or professional, is vocational education. College preparatory courses, therefore, may be considered vocational when they precede college preparation for employment (Mitchell, 1977).

Need

The need for cooperative education may never be greater. We are on the edge of an educational revolution and it

is not only technology that is involved. Educational programs will be given closer and closer scrutiny. The primary concerns of many people center around rigor and relevance.

Agribusiness as an industry is getting some good people from vocational agriculture programs; but the quality is grossly inconsistent. Many industrial leaders almost have come to the conclusion that a partnership with education is tragically impractical and nearly impossible. Many vocational education graduates come to industry unqualified to assume any role in the workplace (Reed, 1983).

Where do these potential employees fall short? Reed (1983) emphasizes that many students lack basic skills of comprehension and computation: simple reading, writing and elementary arithmetic . . . . "We can not hire these people because they would have difficulty . . . in writing up a simple report . . . . These skills are essential workplace skills. Vocational education programs that neglect these skills can not hope to establish a fruitful partnership with business."

Other areas in which potential employees fall short include the lack of a desire to set and achieve high goals and develop the right attitudes. There is more to vocational education than learning to service a diesel engine, grow a crop of mums, or feed a balanced ration or even use a computer. The right attitude about work and the desire to achieve high goals are the keys to successful vocational programs and successful employment. Great rigor in the schools will help build the right attitudes (Reed, 1983).

Linkages between business and industry may never be more appropriate. Practically and financially it is difficult to justify duplicating the facilities and equipment of industry. Cooperative education can play a significant role in promoting linkages with business and industry in agriculture. What better way is there to utilize business and industry facilities, equipment and human resources and link in-school learning to job practice? There is no better way. This partnership is the true essence of SOE.

The provision of resources to learn job skills should not be the only benefit of cooperative education linkages. Cooperative education, if properly structured, can be utilized to stress a positive attitude and commitment to profit. The business of agribusiness is profit. Additionally, cooperative education should be structured to emphasize how a person becomes an owner of a business, an entrepreneur. Profit and ownership should be driving forces instilled in students of agribusiness. Cooperative education can provide the balanced educational program needed for employment and ownership in business and industry. However, cooperative education does not just happen, it has to be planned carefully and systematically.

Responsibility

The nature of cooperative education requires responsibilities be shared between the school and the employers in the community. The school's responsibilities center around selection and recommendation of students, related instruction, coordination, supervision, placement, training plans, and the granting of credit upon completion of the program. The employer's responsibilities include on-the-job instruction, following a training plan, providing a variety of work experiences, supervision, and evaluation. Living up to responsibilities in a systematic job/career development program will enhance vocational education and improve student performance and job performance.

Summary

The potential inherent in cooperative education is significant at a time when business and industry and educational institutions are seeking linkages. Cooperative education can be an integral part of a well-rounded educational program. In our search for excellence in educational programs, well organized and systematically conducted cooperative education supervised occupational experiences may serve the needs of students and industry and be the link that bridges the gap between education and the real world of work.

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Establishing linkages with agribusiness may never be more appropriate than it is now.

Coming in April . . .

SOEP: LABORATORIES

Bridging The Gap In Higher Education

By Duane Kaas

(Editor's Note: Dr. Kaas is the Associate Coordinator for Pre-Occupational Preparation at the University of Minnesota Technical College, Waseca, Minnesota 56093.)

Early in our nation's history, vocational training was delivered strictly through apprenticeship in the community. In 1862, the Morrill Act provided for the development of Land Grant colleges. This legislation was passed in part to meet the expanding technological needs of the agricultural community. In 1906, the University of Cincinnati started a work-study program because it realized this step was important in relating the classroom to the world of work. This program became the foundation for cooperative education which has been established in colleges and universities worldwide.

A Cooperative Education/Internship program can make classroom studies more relevant and give education a new meaning. The basis of cooperative education/internship is student participation in meaningful work experience outside the classroom of such quality and quantity, that unit credit can be given for it.[5]

A cooperative relationship between schools and the agricultural industry has produced a sound educational philosophy that will help train young men and women seeking a career in agriculture. One of the advantages of cooperative education/internship is that it provides a stimulus for students who are poorly motivated in the regular college program. It has been suggested that the experience of being in the real world of work often causes these students to develop a new appreciation for formal study.[3]

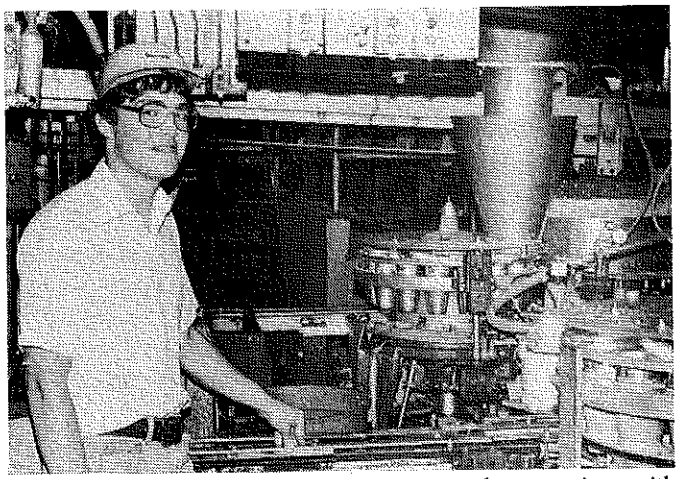
The difficulty, however, is that students who have low motivation and, consequently, low academic achievement are frequently denied the opportunity to participate in the co-op program. Those who are selected are often the most capable, the ones who make the school look good, and the ones the agribusiness may request. Taking a poorly motivated student who has a low achievement record is obviously a bigger challenge for both the school and industry. It is for these students that the strongest case can be made for cooperative education.

Other advantages of cooperative education/internship is the building of a solid bridge of understanding and cooperation between the world of work and the classroom. At the same time, students receive work experience that enables them to assess their career goals before committing many years to career preparation. It fits them into the mainstream of the world of work in direct relationship to their formal education.[2]

One vocational agriculture instructor indicated that the real payoff of cooperative training was observed when students returned to the classroom. Greater enthusiasm on the part of students was very much in evidence, as class participation increased, and students took greater pride in their workmanship.[4]

Co-op Program Design and Implementation

The University of Minnesota Technical College, Waseca (UMW) has conducted a cooperative education/internship program since the college opened in 1971. This program is referred to as Pre-Occupational Preparation (POP) and is compulsory for students seeking an Associate in Applied Science degree. A second term of work experience, following one or more quarters of on-campus study, is optional for those who elect to spend additional time with industry. The initial term of the POP program is awarded 12 quarter-hour credits toward the total of 108 required for



Operating vegetable canning equipment gives students experience with the food industry.

Animal Health Technology students complete their work experience with a veterinary clinic where they assist with giving exams.

graduation. Students can also receive 6 elective credits for participating in the second quarter of the program. This enables a student to receive up to 18 academic credits for work experience.

Proponents of cooperative education and supporters of academics often debate whether or not participation in a formal work experience program should be mandatory, and if academic credit should be awarded for such experience. The design of the program at UMW enables the college to work with students at all levels of academic ability, and with a wide range of career interests. The POP program is firmly committed to a curriculum that requires co-op work experience prior to graduation, and that students participating in this program receive nonadditive credit for their work.

This type of program design at a collegiate level is possible due to administrative support and belief that students receive an essential component of their education through a hands-on process. It is equally important that faculty members believe and participate in cooperative education. At UMW, faculty are involved with counseling students prior to placement on a co-op assignment, assisting with the development of learning goals and objectives to be completed while at the work site, and conducting supervisory visits with students and their employers.

The mechanics of placing 275 to 300 students annually is carried out by two full-time coordinators. This requires being aware of the seasonality and employment needs of the agricultural industry in order to take advantage of the best learning opportunities available to students.

During the initial planning sessions with one of the coordinators, each student discusses a training plan to be implemented, fills out a job application form, and schedules job interviews with prospective employers. Finding the right employer is the key to providing a successful work experience for the student. Employers must be willing to integrate the student's learning goals and objectives into their overall operation and understand the need to fulfill the role of teacher as well as employer.

Once a worksite has been selected, the student and employer fill out a placement agreement that outlines arrangements to be followed during the work experience. Specific items include a starting and ending date, an established wage rate, provision for liability or workmen's compensation coverage, and any other considerations that may be involved.

Evaluating Work Experience

Continuous evaluation and feedback is essential to the success of any program. UMW employs several methods to determine the progress of students on-the-job and to obtain a measure of the overall quality of the training station.

Employers are required to complete monthly evaluations of job performance and discuss these results with their student employees. The employer evaluations, along with written student reports, are sent to the college. These two evaluations, over a three-month period, provide the basis of determining the final grade for the student.

A third method of obtaining input on student performance and quality of work experience is provided by faculty visits to the work site. Each student and employer are visited twice during the term by a faculty member from their respective department. Any problems or concerns the student, employer, or faculty member may have are noted in a visitation report, which is filed with the POP office. Any necessary follow-up is conducted by the coordinators.

Until this past year, student opinion on how well the selected training stations met their learning goals and objectives were discussed on an informal basis. Recently, a written form used to evaluate the effectiveness of the training stations was developed. Several aspects of working with students; such as the cooperation of supervisors and co-workers in providing a good learning environment, willingness to provide necessary support and feedback, as well as added training; were considered to be a fundamental part of being a training station.

The summation of this data will enable coordinators to identify employers who provide the learning experiences students rate highly. Also, if there are certain aspects of a training station that can be improved, the college can work with those employers who wish to increase their effectiveness as a training site.

Meeting Future Needs

Collegiate work experience programs, such as that at the UMW, have been around a long time. Each program will have its own unique characteristics in order to best ac-

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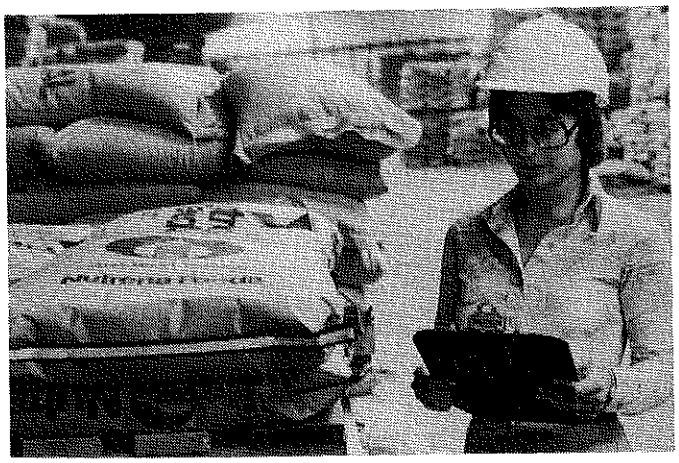
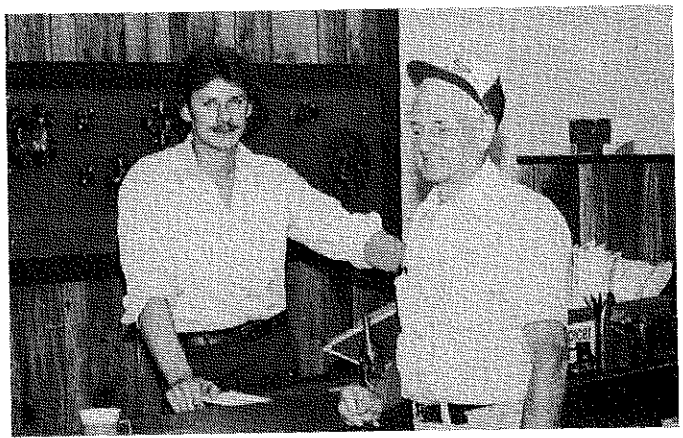


A student gains experience in the feed industry through a work experience with a large wholesale manufacturer.



An agricultural mechanics major gains experience working with customers during a co-op/internship assignment with an implement dealership.

Bridging The Gap In Higher Education

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complish its specific operational objectives. However, the underlying philosophy of credited work experience as part of formal education provides a common bond for all of these programs.

Cooperative Education/Internship will continue to be an important part of our future education for the same reason it was initiated over 75 years ago: A need for practical, hands-on approach to technical education. A recent issue of the CHRONICLE OF HIGHER EDUCATION recognized that jobs available to agriculture students have changed dramatically in the past 10 to 15 years. There are more jobs available, but their content has changed. They are more technical, computerized, and specialized.

The enrollment trends of agricultural colleges today also call attention to the need of providing a practical, experience-oriented curriculum. The latest enrollment figures at UMW indicate that 47 percent of the students attending have a nonfarm background, while 19 percent have had no contact with any type of agriculture. In addition, the student body is composed of 48 percent females and 52 percent males. This nearly equal number of males and females creates a greater numbe of students seeking careers in agricultural-related fields. Many other agricultural colleges are experiencing similar changes in their student profiles.

The question then becomes how do we bridge the gap between students' classroom education and the agricultural industry in which they are seeking a career? Cooperative Education/Internships designed to meet the technical, educational, and social needs of students is the answer.

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THEME

Rewards from Post Secondary Cooperative Experience

"I feel the cooperative work experience program was the most important part of my post secondary education. While working in the agribusiness occupation I learned to assume responsibility for various tasks, to work with fellow workers, and to perform numerous skills relevant to various agricultural occupations. I feel the most important outcome of this experience was being able to obtain a job in an agricultural occupation that coincided with my interests and abilities."

This is how one student summed up a post secondary cooperative experience program in agriculture. For more than a decade post secondary institutions have utilized cooperative experience programs to bridge the gap between school and work in agricultural occupations. To develop this bridge, learning experiences, gained through supervised employment, are combined with occupationally related instruction provided at the post secondary school.

Program Design

In order for a cooperative experience program to be effective, the design of the program must be compatible with the structure of the curriculum at the post secondary school. Comprehensive cooperative experience programs utilize classroom instruction, learning experiences in agricultural occupations, and participation in agricultural youth organizations to develop entry level occupational skills in students.

BY JOHN W. SLOCOMBE

(Editor's Note: Dr. Slocombe is an Assistant Professor in the Department of Agricultural and Extension Education at the University of Idaho, Moscow, Idaho 83843.)

The classroom instruction provides the student an opportunity to learn basic occupational skills they will perform at their supervised employment site. One of the greatest concerns among educators is the relevance of the curriculum and instruction to the needs and interests of students. The teacher-coordinator, student, and employer work cooperatively to establish an appropriate curriculum that will meet the needs and interests of each student. To insure relevant instruction is provided, students develop a personalized training plan for on-the-job experiences which is based on the requirements of the agricultural occupation and individual student needs. The classroom instruction is supplemented with practices and ideas of employers which re-emphasizes the importance for students to develop basic occupational skills.

The supervised employment in agricultural occupations allows the student to develop general employment attitudes, knowledges and skills specific to an agricultural occupation. Through this experience, students learn various methods to apply what has been learned in the classroom. Through the supervising employer, students are able to note differences in practices among agricultural occupation in which they are employed.

Post secondary cooperative experience programs emphasize the importance of student involvement in corresponding vocational youth organizations. Even though these organizations are identified by a variety of names, they exist to provide students an opportunity to further develop citizenship and leadership skills that are essential to successful performance in agricultural occupations. In addition, these organizations serve as a vehicle to provide recognition for group and individual achievements.

Program Benefits

Cooperative experience programs that are properly executed yield many benefits to the students, employers, and post secondary school. Benefits commonly gained by the students include:[3]

1. Learn to assume responsibility.
2. Acquire good work habits.
3. Earn while they learn.
4. Realize the relationship between on-the-job production and wages.
5. Realize the relationship between education and job success.
6. Develop skills in working with others.
7. Develop compentencies needed for successful performance in agricultural occupations.

Supervising employers view post secondary cooperative experience programs as an effective method of preparing students for agricultural occupations. Common benefits gained by supervising employers include:[3]

1. Provides a pool of part-time workers from which they may select permanent employees.
2. Gain opportunities to refine and validate their employee training procedures.
3. Provide on-the-job instruction consistent with current industry practices.
4. Train employees that have chosen a career based on their interests and aptitudes.
5. Reduces turnover because the employees have become adjusted to the job before they accept full-time employment.

Post secondary cooperative experience programs have been successful in keeping students in school for a longer period of time. When post secondary students become involved in an agricultural occupation that coincides with their interests and abilities, they possess a high level of motivation to learn. Thus, post secondary schools offering cooperative experience programs enjoy many benefits. Among these benefits are:[3]

1. Enlarged learning facilities for students through the utilization of community facilities and resources.
2. Provides an opportunity to relate classroom instruction to job requirements.
3. Provides individualized instruction.
4. Brings education and industry together to develop a strong vocational education program in agriculture.
5. Enables the school to keep abreast of new developments in business and industry.
6. Develops good community-school relations.
7. Acquaints employers with the work that can be performed by students participating in cooperative experience programs.

Teacher-Coordinator

What is required to be a successful teacher-coordinator for a post secondary cooperative experience program? Advantageous characteristics are understanding, sincerity, sensitivity, empathy, vitality, and a venturesome spirit which responds to the challenge of everyday problems.[1] The teacher-coordinator is the key to a successful cooperative experience program. This person coordinates and supervises the on-the-job training and teaches the related classroom instruction.

The job description of a teacher-coordinator provides some indication of the competencies they must possess. Common duties of the teacher-coordinator include:

1. Guiding and selecting students.
2. Placing students in training jobs.
3. Assisting students in adjusting to their work environment.
4. Improving training done on-the-job.

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Students develop the competencies needed to succeed on-the-job.

Rewards From Post Secondary Cooperative Experience

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5. Coordinating classroom instruction with on-the-job training.
6. Assisting students in making personal adjustments.
7. Directing vocational youth organizations.
8. Providing guidance to graduates and adults.
9. Administering program activities.
10. Maintaining good public relations.

As you see, an effective teacher-coordinator wears many hats. The phrase "A Chain Is No Stronger Than Its Weakest Link" is especially true for the teacher-coordinator of a post secondary cooperative experience program. The success of any cooperative experience program is a reflection of the teacher-coordinator. Thus, they must have a working knowledge of the program, know the opportunities available in their community and work cooperatively with employers to develop effective cooperative experience programs in agriculture.

Summary

No educational program can substitute for a real job where students learn to apply knowledge, use skills, and learn to communicate and interact with people. Post secondary cooperative experience programs are designed to prepare students for entry and advancement in agricultural occupations. The most beneficial outcome of a cooperative experience program is that students graduate from post secondary schools with both job skills and agricultural employment experience. While cooperative experience programs are as basic as reading, writing, and arithmetic in vocational education, greater emphasis must be placed on implementing these programs in agriculture at the post secondary level in the future. Simply stated, post secondary cooperative experience programs in agriculture deserve everyone's best efforts because they yield such rich rewards.

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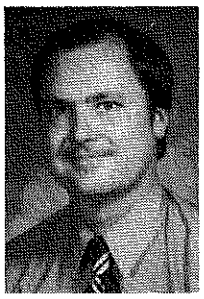
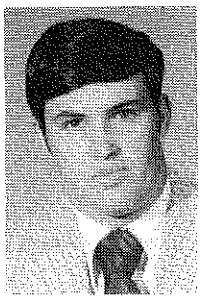
THEME

Cooperative Education: More Than Just A Part-Time Job





By Jack Morgan and James R. Collins

(Editor's Note: Mr. Morgan is a Vocational Administrator for the Gonzales Independent School District, Gonzales, Texas 78629; and Dr. Collins is an Assistant Professor in the Agriculture Department at Southwest Texas State University, San Marcos, Texas 78666.)

Cooperative education programs in agriculture have been designed to provide technical instruction as well as on-the-job training and work experience for students preparing to enter agricultural occupations. This idea of supplementing technical instruction with actual work experience in an industry setting is not new, nor is it restricted to the vocational agriculture program. A quick glance through most any text on the history of vocational education will reveal that there has long been an interest in combining the technical aspects of many trades with actual experiences on the job. In the past, many trades were learned while actually working at the trade.

With the Vocational Educational Act of 1963 and the ensuing Vocational Amendments of 1968, cooperative education has gained emphasis in many of the vocational programs conducted in the public schools. The idea of allowing students to spend part of the school day working in a training station has for the most part been well received by students, teachers and employers.

Yet, cooperative education has not been without its critics. Either through misuse or misunderstanding, there has been some opposition to cooperative programs. In some instances, it has drawn complaints due to small class sizes or low quality training stations. In other instances, it has been due to training for occupations that might be considered to fall outside the agriculture industry. Cooperative education is present in most all of the areas of vocational education and the criticism has not been restricted just to agriculture. Criticism of cooperative education programs has prompted remarks such as those by Ross Perot, Chairman of the Select Committee of Public Education in Texas, who stated "We should eliminate high school programs whose real purpose is to allow students to leave

school part-time to earn money to pay for cars". If we are to have cooperative programs that are serving the needs of our students, we must strive to make our programs of high quality and more than just a way to pay for cars.

Training Stations

While the total cooperative program involves classroom learning with work experience, most of the student's time is spent at the job site. One of the key factors in the operation of any cooperative education program is the training station. Training stations are those businesses where students are employed as a part of their cooperative training.

The quality of the training stations used in the program will, to a large extent, determine the quality of the total program. In many communities, it is difficult to locate adequate numbers of training stations which are agriculturally related. When training stations are difficult to locate, it becomes tougher to descriminate between high and low quality stations. An additional problem area usually concerns the availability of jobs locally for students who complete their training in a particular occupation. Problems such as these make the teacher-coordinator's job more than just riding around supervising student workers.

Those training stations which we can justify in terms of occupation and employment opportunities may still not meet the test for a quality training station. The employer must be interested in providing a learning experience for the cooperative student. Those employers who see cooperative training only as a good source of cheap, part-time labor should be avoided. In order for the training of the student to be complete, the employer must expose the student to a variety of training processes in a sequential manner. If employers are involved with the planning of the on-the-job training for the student, chances are that they will be more interested in moving the student through the various phases of the training.

Supervision of the Training Station

Since cooperative education depends on businesses in the community to provide training stations for students in order for the program to exist, the teacher-coordinator must be tactful when contacting these employers. The teacher needs to visit the training on a regular basis, but always for a specific reason. Some reasons for visiting a training station include:

1. To explain the cooperative education program to a prospective employer.
2. To place a student in a training station.
3. To plan the training sequence the student will follow on-the-job.
4. To explain the evaluation instrument that will be used to evaluate student progress.
5. To observe student progress.
6. To discuss with the employer a specific problem regarding the student.

It is most important that the teacher-coordinator devise a method of scheduling visits to training stations in order to be systematic in making visits and to eliminate the possibility of neglecting a visit to a particular station. In some cases, it is wise to call ahead to set up an appointment with an employer rather than just walking in for a visit. But, the need for a formal appointment or casual visit needs to be left to the discretion of the teacher-coordinator.

Learning at the Training Station

The benefits to be gained by working at a training station in an industrial setting are many. Perhaps the most obvious is that students learn by doing. Upon completion of the program, they have actually performed those skills associated with an occupation. Students then seek employment with at least some experience. The tools and equipment that the student uses in a training station are often more advanced than a local school might have in their facilities. The job is learned under practical conditions and the student knows more than just the textbook method of performing various tasks. This exposure to the real world may actually determine how well the student performs upon entry into an occupation.

Learning experiences take place in the actual work place that cannot be taught in a classroom or laboratory setting. The development of proper work habits such as getting to work on time, getting along with co-workers and dealing with the public are a necessity for employment in most any occupation. These good work habits are many times the only thing that separates the people who are working from those who are standing in an unemployment line. More times than not when workers are fired from a job it is not because they lack the technical skills to do the job, but that they are unable to get along with co-workers or do not get to work on time. Cooperative training programs give the student the opportunity to develop these habits while still in school, before they go out to seek full-time employment.

Benefits of Cooperative Education

When properly conducted, cooperative education programs can be very beneficial to the students, the school and the employer. The school is able to provide the students with a wide range of occupational training, while the cost of supplying a laboratory, equipment, tools and materials is shouldered by the employer. Students benefit by having a wider range of occupations available to them than would be possible if it were totally up to the school to provide training laboratories. The school classroom or laboratory setting can only simulate actual employment, whereas cooperative education programs involve the student in actual experience in the real world. Employers benefit by maintaining a continuous pool of trained, prospective employees for themselves and the community.

Probably the greatest benefit that comes from cooperative education is the orientation that a student receives to a particular occupation. The student gets the opportunity to try-out an occupation without being forced to make a total commitment to the occupation. While it is highly desirable for the students to enter the occupations related to their training upon completion of the program, it is not absolutely necessary in order for the student to benefit from the program.

Throughout this country there are tremendous numbers of workers who are unhappy with their present occupations, but feel trapped and most likely will remain there until retirement. Herzberg (1959) stated:

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Cooperative Education: More Than Just A Part-Time Job

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> Work is one of the most absorbing things men can think and talk about. It fills the greater part of the working day for most of us. For the fortunate it is the source of great satisfaction; for many others it is the cause of grief.

If students can learn during high school that they don't want to be in a particular occupation, they can perhaps avoid this situation of grief or entrapment. The only way to know for sure if an occupation is going to be satisfying is through actual work in the occupation. Cooperative education provides this opportunity.

Cooperative education, like most things, is very valuable when properly used. When abused, however, it can be a source of problems to all concerned. If cooperative education is to survive in these times of accountability and budget cuts, we must strive to maintain high quality programs. To establish and maintain a high quality program will require work, but work is what cooperative education is all about.

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THEME

Cooperative Education: What Is Our Role?

BY STEPHEN MILLER AND EDGAR YODER

(Editor's Note: Mr. Miller is a Vocational Agriculture Teacher at Conrad Weiser High School, Robesonia, Pennsylvania 19551; and Dr. Yoder is an Assistant Professor in the Department of Agricultural and Extension Education at Pennsylvania State University, University Park, Pennsylvania 16802.)

What are the elements that distinguish cooperative vocational education from general work experience programs? How is the cooperative education program articulated with my vocational agricultural program? Should my school deliver cooperative education through a capstone approach or a diversified occupational education (DOE) approach? What roles do I assume as a teacher-coordinator? Who will be responsible for supervising students in their cooperative education placement sites? Answers to these and related questions must be clarified if cooperative education programs are to be a viable component for delivering vocational agriculture at the secondary school level.

Key Elements

Local school administrators have frequently contended that if a student was released from school and was working, the student was involved in a cooperative vocational education program. Such a contention existed because of the literal interpretation applied to various segments of cooperative education as defined in the 1976 Vocational Amendments.

Key elements which distinguish cooperative vocational education from general work experience programs include:

1. Instruction provided by the vocational agriculture teacher(s) in the school and at the cooperative education placement site are based upon the students' career goals and objectives.

2. The activities with which students are involved at the placement site are integrated into the in-school learning activities. The problem solving method of instruction focuses on the activities and problems the students encounter at their training stations.

3. Cooperative education placement sites are selected because of their potential for helping students attain career goals and objectives. Thus, specified criteria are used to evaluate a potential placement location. Placement stations are selected which will provide supervision by industry personnel.

4. The school makes a commitment to the students' career development by providing sufficient time for the teacher to supervise students at their placement stations.

5. The instructor and the employer, and/or a designated supervisor, discuss the student's progress and plan needed learning experiences for the student.

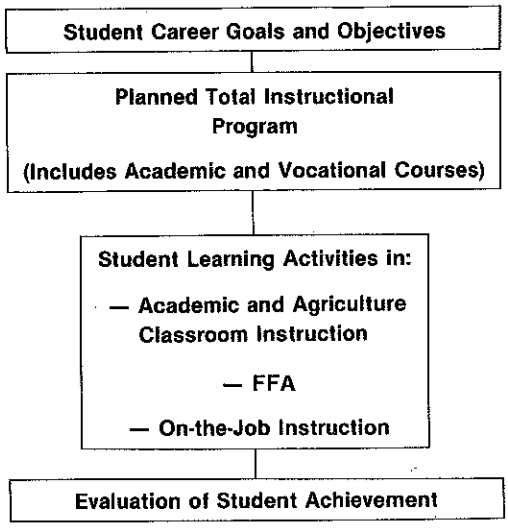

Figure 1. Framework for Cooperative Vocational Programs in Agriculture

6. The employer understands and accepts a teaching responsibility and assigns a person to work directly with the student and teacher.

Cooperative vocational education programs in agriculture must incorporate these key elements. Such programs in agriculture must be based on students' career goals and objectives. The cooperative education plan must involve the student in all phases of the vocational agriculture program (Figure 1).

Role of the Teacher

The vocational agriculture teacher assumes the key role for delivering vocational agriculture through the cooperative plan regardless of the delivery approach used. The teacher has two major instructional responsibilities in the cooperative education plan: (1) the teacher is responsible for providing instruction in the school related class and (2) the teacher is responsible for coordinating instruction received at the student's placement site.

In schools using the capstone or self-contained cooperative program approach, the teacher may be referred to as the teacher-coordinator for cooperative agriculture programs. The role of the teacher-coordinator is similar to the role of the typical vocational agriculture teacher. Butler and York (1971; pp. 8-9) identified the following major roles and tasks for teachers involved in the cooperative education plan.

MAJOR ROLE	KEY TASKS
Planner	Conduct student interest survey
	Conduct employer availability survey
	Develop policies, standards, and agreements
	Assist with budget development
Promoter	Engage in public relations activities
	Prepare reports and other information releases of interest to the public
Coordinator	Organize advisory committee and be certain it is functioning well
	Arranging student interview and placement with approved employers
	Assist students to obtain work permits, Social Security cards, and health certificates
	Develop student schedules
	Coordinate in-school instruction and on-the-job experience
	Confer with employers at regular intervals and visit students on-the-job
Teacher	Provide in-school related instruction: prepare and teach courses, arrange facilities, provide teaching materials, seek other learning opportunities
	Provide needed on-the-job instruction
Counselor	Confer with students about personal and program problems
	Confer with parents and/or guardians
Evaluator	Develop community employment profile
	Determine readiness of students for cooperative program
	Determine suitability of employers for cooperative program
	Perform continuous planned evaluation of the total program
	Conduct follow-up studies of graduates

Figure 2. Teacher Roles and Key Tasks

Potential Problem Areas

Local school administrators and vocational agriculture teachers must specifically identify the role of the vocational agriculture teacher in several key areas if the cooperative program is to function most effectively. These key areas represent those elements in which problems most frequently occur.

STUDENT SUPERVISION

Wallace (1970) indicated two of the most critical tasks performed by teacher-coordinators are (1) conducting supervisory visits with students and employers at the placement sites and (2) assisting employers in developing and adjusting training plans to attain students' objectives. Local school personnel must develop schedules which enable vocational agriculture teachers to perform these two critical tasks.

If vocational agriculture teachers are to provide related classroom instruction for students in the cooperative education program, vocational agriculture teachers must have direct contact, through supervisory visits, with students and employers at the work stations. In this way, a direct linkage is provided between in-school instruction and the students' work activities. We, thus, can provide the most effective instruction for cooperative vocational agriculture programs. McCracken (1975; p. 182) indicated "a combination of classroom instruction and supervision of student experience is essential. Neither instruction without practice nor practice without instruction is desirable."

The teacher-coordinator for cooperative agriculture programs is responsible for designing an instructional program that involves classroom and laboratory instruction, FFA activities and supervised experiences. In the cooperative plan, this basic integral relationship between the three vocational agriculture program components has not changed. The manner in which we deliver the program is altered when compared to our typical in-school vocational agriculture program, but the major components of the program remain the same. The teacher still has the direct responsibility for organizing and delivering activities related to the three major components. If time is unavailable to the vocational agriculture teacher, a problem evolves. To allow local school personnel to delegate that responsibility to someone other than the vocational agriculture teacher to attempt to provide adequate supervision when students interested in agriculture are involved, throws the baby out with the bath water.

ARTICULATION

In schools offering vocational agriculture programs, the addition of a cooperative agriculture program requires identifying how the cooperative program is articulated with the current structure. A cooperative agriculture program has often been viewed by students as a chance to get out of school for part of the school day. Students, parents, employers and school personnel must view a cooperative agriculture program within a total articulated plan for vocational agriculture.

In either the capstone, diversified occupational education or self-contained delivery approach for cooperative education; the teacher-coordinator must identify how the cooperative agriculture program fits into the total educational package. We must clearly identify the educational program prerequisites for students participating in cooperative agriculture programs. It is imperative that we identify the knowledges, attitudes, and skills that students are

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Cooperative Education: What Is Our Role?

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expected to have developed through any previous vocational agriculture classes. In such an approach, cooperative education represents an outgrowth of the educational program rather than being tacked on the end.

DEVELOPMENT OF PLACEMENT STATIONS

The selection and development of placement stations represents an important activity of the successful cooperative program. The placement station is the instructional laboratory and represents an extension of the in-school instruction. The placement station is not merely a place to work.

Perhaps the greatest paradox and potential problem for cooperative agriculture programs occurs when employers view the students as part-time workers to perform mundane tasks; whereas, students expect a variety of occupational experiences related to their educational and career goals. Placement stations selected should:

(1) Provide experiences related to the students' career goals and objectives.
(2) Provide opportunities for being involved in a variety of experiences.
(3) Provide for on-the-job supervision by the employee or a designee.
(4) Use modern facilities and equipment appropriate for the occupation.
(5) Have a reputation for conducting business in an ethical manner.

Placement station development requires the teacher to actively work with potential employers in developing work situations to meet the needs of students. Teachers do not merely match the student with existing part-time jobs. "Desk coordinators" have no place in a cooperative agriculture program. Teachers must have the time and resources to work in the community for identifying potential placement stations and developing them into the most desirable setting possible.

Summary

Cooperative agriculture programs represent an educational plan for meeting students' career goals and objectives. School personnel must be willing to allocate needed resources for delivering quality cooperative agriculture programs. The most important allocation is the vocational agriculture teacher's time. School boards must provide sufficient released time for vocational agriculture teachers to provide supervision at the placement sites. Only then will we have cooperative programs that most effectively combine the three key vocational agriculture components of classroom/laboratory instruction, FFA activities and supervised experiences.

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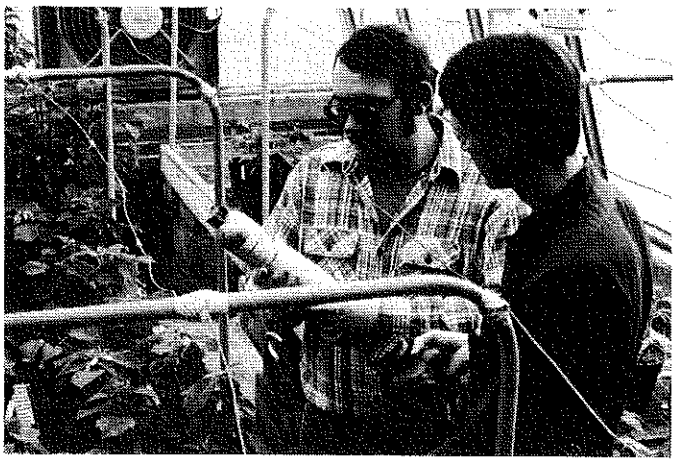
Career objectives form the basis for the competencies learned through cooperative education programs.



Learning safety precautions are among the competencies needed in many occupations.

Coming in May . . .

SOEP: URBAN PROGRAMS

THEME

Cooperative Education: A Valuable Tool

By William Hamilton

(Editor's Note: Dr. Hamilton is an Assistant Professor of Agricultural Education in the Department of Education at Purdue University, West Lafayette, Indiana 47907.)

Entrepreneurship is one of the current buzz words in education. Vocational agriculture has provided this type of experience since the beginning of formal classes under the Smiht-Hughes Act. Farm projects or supervised farming programs provided hands-on experience in agriculture. Since not all students had the necessary opportunities to practice ownership and management of their project, farm placement for experience was provided as a way to gain needed experience without individual projects. Cooperative education (CE) has grown out of these early efforts.

Broadened Base

Cooperative education is the involvement of students in the real world of work through a cooperative work experience program conducted through the cooperation of local community businesses, farmers, and school personnel. The students learn employment skills of both a manipulative and a human relations nature. Many specific advantages are evident for the cooperators in a CE program. Students learn and earn while participating in a specific occupation. The school broadens its base of curricular offerings and provides experiences to learners beyond their ability to supply. Employers have a hand in directing the training of replacement workers and the opportunity to serve the youth and community. Parents see their teen-age youth gaining experience in a marketable skill while making gainful use of spare time

Program Initiative

Starting a CE program ideally requires several months of lead time before the class is placed in the school schedule. The individual who desires to establish a cooperative education program will find the process utilizing many of the following steps.

1. Provide the school administration with a rationale for the program.
2. Obtain administrative approval for starting the program.
3. Form an advisory council to aid in planning the program.
4. Assess the community's need for trained workers.
5. Assess the students' interest in the program.
6. Publicize the program.
7. Select student participants.
8. Select training stations.
9. Match the students with training stations.
10. Prepare and conduct a related class.
11. Prepare training plans and agreements for each student.
12. Visit students at their training stations.
13. Evaluate students (assign grades).
14. Evaluate the program.
15. Maintain program records.

Vocational agriculture CE classes are conducted with students placed in a wide variety of job titles related to agriculture. Helpful guidelines in selecting training stations include careful attention to:

- The range of tasks and skills to be learned or developed.
- The duration of employment for the school year.
- The availabilty of on-the-job supervision.
- Safety in the work place.
- A favorable attitude of co-workers and employers.
- Employer recognition of the learning process vs. production levels.
- Careful consideration of any work with relatives to be sure an employer-employee relationship exists.
- Legal requirements, including hazardous occupations.
- Wage agreements.
- Employer willingness to confer with coordinator before terminating students.

Starting a cooperative education class will require a teacher-coordinator who is able to work with students, teachers, employers, and parents and is able to perform job activities without close supervision. Time should be set aside for the teacher-coordinator to do evaluations, counseling, keep records, do public relations work and many other tasks. The effectiveness of the program depends upon the ability and dedication of the teacher-coodinator in building working relationships with CE clients.

Training plans and agreements are essential to conducting quality programs and the cooperation of employers is critical to training plan development. Training plans and agreements detail the training period, the responsibilities of each party to the agreement, the provision for tasks to be learned on-the-job and the related instuction to be provided at school; and signatures of the student, teacher-coordinator, employer, and parents. The training plan portion of the agreement is a blueprint for developing competence in the chosen job. In many respects, the plan is similar to the individualized educational plans developed for disadvantaged or handicapped students. One of the major differences is in the size of the committee developing the plan for a given student. If any element of a hazardous occupation is to be included in a CE, a signed training plan is a legal requirement for the student's protection.

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Cooperative Education: A Valuable Tool

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Frequent teacher visitation to the training stations will provide feedback on student competence, the related classroom instruction needed, and the everyday problem solving required in any enterprise. Coordinators will make their visits match the schedules of the training station and provide an open communication link between school and work.

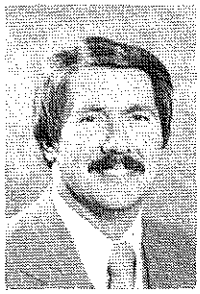
With the use of CE, a vocational teacher can recommend students upon the basis of what the students can do (performance), rather than on the basis of what grades they have earned. Cooperative education offers a timely way to prepare students for the life long experience of learning and working at the same time.

ARTICLE

Extension Faculty Supervise College Cooperative Students

By Maurice P. Hartley

(Editor's Note: Dr. Hartley is Director of the Cooperative Education Program at Cook College, Rutgers University, P.O. Box 231, New Brunswick, New Jersey 08903.)



"A rose is a rose is a rose" may be true of a rose, but the Cooperative Education Program at Rutgers University, Cook College, is an academic endeavor with dimensions unique among secondary and post secondary institutions. To explain, a bit of history is required.

The Cook College experiment began with its 1973 transformation from the College of Agriculture and Environmental Science. Retaining its rich landgrant heritage, Cook's three distinctive faculty forums; Teaching, Research, and Cooperative Extension; strategically united to provide programs of study that engage students in rigorous academic pursuits that require a constant force on the development of practical solutions to the diverse needs of the most urbanized state in the nation. This article describes a model for the supervision of students in occupational experience programs which other institutions may wish to adopt.

Co-op at Cook

It is significant, though not surprising, that Cook College's Cooperative Education was also initiated in 1973. Co-op at Cook is an optional program which permits students to alternate terms of full-time, campus-based study with periods of full-time, paid employment in positions related to their major fields. The faculty has opened the program to students in good standing from all curricula. Although a few summer only placements are permitted, alternating work-learn periods average six months in length. Thus, most students are graduating in four-to-five years with 9-to-12 months of practical experience.

In recognition of the validity of the learning which occurs during the work period, the faculty awards academic credit. Three-to-six credits may be earned during each placement period, and a total of 15 may be applied toward the 128 required for graduation.

It is important to note that these credits are not earned for having a job, but rather for the educational benefits of the experience. It is at this juncture that the more unique aspects of our program become visible, and particularly so for those majoring in the agricultural sciences.

The Role of the Faculty

An especially innovative element of Co-op at Cook is found in the fact that we do not have Co-op Coordinators per se. Rather, the potential exists for any faculty member to serve in the role of sponsor for students during their co-op assignment. For example, a faculty of the Cooperative Extension Forum are based in every county in New Jersey. When the Co-op placement is so related, these extension agents serve as the students' sponsors. Thus, they are immediately available to consult with the student and the employer throughout the term. They, like their campus-based counterparts in the Teaching Forum and Research Forum, also provide valuable job contracts via their in-the-field associations with employers. Furthermore, these sponsors are intimately involved in program evaluation, pre-and post-placement counseling, and on-site visitation of the students.

Cooperative Extension and Agriculture Education

Digressing for a moment, we should recall the Cooperative Extension's role in agricultural education is not a new one! On May 15, 1862 Abraham Lincoln signed the Organic Act creating the United States Department of Agriculture. A few weeks later he signed a bill introduced by Vermont Congressman Justin Smith Morrill creating landgrant colleges. The Morrill Act provided for at least one college in each state," . . . where the leading object shall be, without excluding other scientific or classical studies, to teach such branches as are related to agriculture and the mechanic arts."

For several years thereafter, agricultural education, extension-type, was provided primarily through farmers' institutes under the direction of the U.S. Department of Agriculture. Then, on May 8, 1914, President Woodrow Wilson signed a bill co-sponsored by South Carolina's Frank Lever and Georgia's Hoke Smith. The Smith-Lever Act provided for mutual cooperation of the USDA and land-grant colleges in conducting agricultural extension work. In brief, it specified that the work ". . . shall consist of giving instruction and practical demonstrations

in agriculture and home economics to persons not attending or resident in said colleges . . ., and imparting to such persons information on said subjects through field demonstrations, publications and otherwise." Today, more than 3,000 Extension offices throughout the nation form the largest problem-solving educational system in the world.

Although the structure varies somewhat from state to state, extension specialist and county agents in New Jersey are full-fledged members of the Rutgers University, Cook College, faculty. While their involvement as co-op sponsors represents only a small portion of the contributions they make, the key role they have in the educational and career development of our students cannot be overstated. A primary component in this development is the co-op student's individualized learning contract.

The Co-op Learning Contract

As a device with which to guide student learning, the contract method is not a new invention, but its application within agriculturally oriented cooperative education programs at the college level is somewhat unique to Cook College. Following guidelines established by the faculty, students and their sponsors negotiate a contract consisting of several parts. The first portion includes general placement data such as the location, period of employment, salary, supervisor's name, address, and phone number, and the student's job title with a description of the work-related activities and responsibilities known at that date.

Part II of the contract requires the identification of objectives to be achieved within the work-learn setting. The faculty sponsor encourages students to consider the full range of human skills: cognitive knowledge, manual and technical skills, communication skills, interpersonal relations, and so on. Three groups of objectives typically appear: (1) those related to the student's academic major; (2) those specific to the employment opportunity; and, (3) those which address the more general developmental needs of the student.

The third part of the learning contract specifies the plan of evaluation that will apply. Where students elect to register for three credits, they are expected to meet their commitment to the employer, maintain a thorough log recounting significant day-to-day activities and learnings, and prepare a synthesis paper, typically 7-to-10 typed pages, that meets college-level standards. The paper includes a description of the job, the work setting, and the nature of the work environment. Students are expected to discuss objectives met, those not met, cite any unanticipated learnings, and specify new areas for development realized as a result of the experience. Finally, they must provide a summary evaluation including ways the experience related to classroom studies and its effect on their career choice and development.

Students desiring to earn four, five, or six credits must meet all requirements outlined above and negotiate a scholarly project and/or a seminar presentation. Often students and their sponsors agree upon projects that make significant contributions to the employers as well as to the students. Seminars usually take the form of a class report in which the scholarly project and pros and cons of the co-op experience are discussed. This activity provides the much needed feedback about the new developments and practical realities of the work-world to campus-based students and faculty. Ideas presented often lead to modification in course content.

Students are expected to review their contracts with their work supervisors. Often additional objectives are identified in the process. Eventually, the student provides the employer, the faculty sponsor, and the co-op staff with copies of the contract. Where feasible, the co-op staff and faculty sponsor visit the student on the job and monitor the student's learning throughout the period of employment. In-state placements are especially effective and convenient since extension faculty are already located in each county and serve most of the co-op employers anyway. Copies of the contract are available upon request from the author.

Range of Co-op Placements

Thirty-nine supervised, occupational-related placements were made in 1974-1975 (the first year of the program), 102 the second year, and placements have averaged over 200 each year through the eighth year. In addition to New Jersey and more than 30 other states, Cook College students have co-oped in six countries abroad. Sites have included family-owned

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Extension agents and co-op students teach consumers about new meat grading standards and labeling. (Photo courtesy of Rutgers University)

A co-op student preparing soil learns the proper use of modern machinery. (Photograph courtesy of Rutgers University)

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farms, commercial farms, and a variety of state and federal agencies of agriculture. Among these are the Farmers Home Administration, the Agricultural Marketing Service, and the Soil Conservation Service.

In addition to the nitty gritty of the day-to-day farming and production agriculture, our students are in positions to learn about, and in some cases to advise, farmers and the managers of agricultural businesses on the best ways to grow, market, process, and use farm products. They suggest ways to adapt scientific methods to individual needs. Others help farmers solve everyday problems of crops and soils, livestock and poultry, and farm machinery and buildings. They assist farmer cooperatives, and the wholesalers and transporters of farm goods. Still others have positions with professionals who serve agriculture: the Cooperative Extension Service, veterinarians, vocational agriculture teachers, bankers, and so on.

Summary

The Cook College Cooperative Education Program is making significant contributions to agricultural education and the agricultural community. The program is working because faculty and students recognize the value of experience-based education. It is working because the Extension faculty and the teachers of agricultural science are closely guiding student learning through use of the learning contract, counseling, and supervision. Together, we are producing better educated and better prepared graduates who are assuming positions of responsibility and service to agriculture.

Co-op director Hartley visits students to discuss their learning objectives and how these are being met in the greenhouse setting. (Photograph courtesy of Rutgers University)

A co-op student monitors the bacterial quality of shellfish "farming" waters at New Jersey's Department of Environmental Protection Water Pollution Control Laboratory. (Photograph courtesy of Rutgers University)

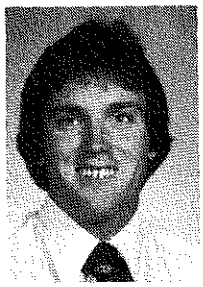
Remaining 1984 Themes on SOEP

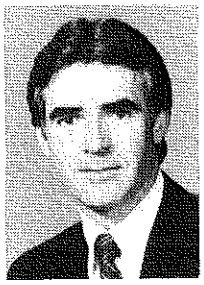
MAY . . . . . Urban Programs	SEPTEMBER . . . . . Mechanics
JUNE . . . . . Recordkeeping	OCTOBER . . . . . Forestry, Conservation and Recreation
JULY . . . . . Sales and Service	NOVEMBER . . . . . Adults
AUGUST . . . . . Horticulture	DECEMBER . . . . . Post Secondary

ARTICLE

Informing Parents about SOE

Informing parents on the benefits their sons or daughters can reap from supervised occupational experience programs can lead to many rewards, not only for the student but the vocational agriculture instructor as well. Students with well planned and career oriented supervised occupational experience programs will generally be the more motivated and interested students in the classroom. Because their SOE programs are developed around their interests, the students are more prone to want to learn approved practices taught within the classroom. But how will informing parents about SOE help?





By Dennis Riethman and Kirby Barrick

(Editor's Note: Mr. Riethman is a Vocational Agriculture Instructor at Coldwater High School, Coldwater, Ohio 45828; and Dr. Barrick is an Assistant Professor in the Department of Agricultural Education at The Ohio State University, Columbus, Ohio 43210.)

Critical Steps

Supervised occupational experience programs are generally designed in cooperation with the parents. Parents who are informed and who fully understand the operation and objectives of a supervised occupational experience program will be more inclined to work with their son or daughter. Well informed parents are more willing to provide the students with opportunities for SOE. They will also provide increased assistance and training for the student along with providing needed encouragement. Informed parents will also provide positive support for the vocational agriculture/FFA program and the teacher. Certain steps can be very helpful and should be followed when informing parents about SOE programs.

Make Home Visits

High quality SOE programs begin with supervision and making home visits. An instructor who is well informed about the student's home situation will have a greater capability of providing guidance in establishing an occupational experience program with the student. Meeting the parents during the first home visit helps ensure that the parents know the purpose of SOEP and teacher supervision and the value of planning the SOE program.

Conduct an Orientation Program

An orientation program is a good beginning for the year. Vocational program objectives and how supervised occupational experience programs provide opportunities for students to apply classroom instruction are important aspects to be explained. Parents need to realize how student growth in an occupational experience program leads to various awards. Parents take pride in seeing their son or daughter receiving recognition for achievements in SOEP through the FFA awards program. The orientation program may be a visit to the home prior to the start of school or a group meeting in the evening early in the school year.

Establish Long-Range Plans

Parents need to know that vocational agriculture and SOEP are goal oriented programs. Long range SOEP plans help the student, teacher and parent prepare for the student's future. Parents should assist in writing and revising the SOEP plans so that the student's goals can be reached. Plans should be set for the remainder of the student's vocational agriculture program, whether that is one year or six. A goal for one of the teacher visits each year should be to update the student's long-range SOEP plans.

Follow-Up Visits

Follow-up is also important when informing parents about SOE programs. Visitations to supervise a student's SOE program should be frequent, including conferences with the parents. During these conferences, information can be exchanged on student progress regarding occupational experience and classroom work. These conferences can also be used to explain the requirements and guidance which may be needed to lead the studetn to recognition. Parents are supportive of an instructor who has a genuine interest in assisting students toward being successful.

Summary

Parents who are informed of the program objectives and the rewards or results their son/daughter can receive from supervised occupational experience programs will be the most helpful and supportive of the vocational agriculture program and the instructor. Benefits such as obtaining employment skills, learning good work habits, use of approved agricultural practices and keeping good records should impress most parents. It is up to the teacher to see that the students work toward such rewards and the parents know those rewards are a result of a high quality supervised occupational experience program.

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ARTICLE

The Bragbook

By Giovannia Ferguson

(Editor's Note: Ms. Ferguson is a Graduate Assistant in the Department of Vocational Education, College of Education, Box 3374, University of Wyoming, Laramie, Wyoming 82071. She is a former teacher of Vocational Agriculture in Los Angeles, California.)

One of the challenging tasks for vocational agriculture teachers is presenting their supervised occupational experience programs to potential employer-trainers. How they accept these presentations may determine whether or not training stations are established. The bragbook, a portfolio, is an invaluable aid in packaging and selling such programs.

The classic tool in the sales and modeling professions is the portfolio, which is essentially a looseleaf notebook containing a set of skillfully chosen visual aids, generally photographic. These aids enable the salesperson or model to flash out the presentation and give the potential buyer the opportunity to visualize the product in use or the model promoting the product.

During the course of the presentation to a prospective employer-trainer, the bragbook is used as a sales aid. It is much easier to talk about a photograph than to describe your SOE program in abstract. When directing the attention of someone to the unique aspects of the vocational agriculture program, it is simpler, by far, to point out facilities and equipment than to just talk about them. This is especially true if there are aspects of the program that are difficult to explain.

Other Uses

There is no better method, other than direct experience, for recruiting new program participants than to allow them to thumb through the bragbook, and see how your SOE program is succeeding. The bragbook is also a great public relations vehicle for initiating new administrators, teachers, and school board members to the role of vocational agriculture in the scheme of education and in the community.

Parents also seem to appreciate the satisfaction of knowing that their tax dollars are generating profitable returns to the community. Typically, they enjoy seeing their offspring pictured in the bragbook.

Classroom spirit also can be stimulated when students are able to see their pictures posted on a bulletin board.Use candid shots with students busy in the shop, laboratory, or at a training station.

Development

The bragbook can be developed, inexpensively, from materials commonly found in the department. The basic components of the book include:

1. Standard three-ring binder (zipper optional)
2. Black or dark color vinyl cover with one or two inside pockets
3. Transparent plastic pages
4. Divider pages with transparent plastic index tabs

The standard ring-binder is of adequate size and allows pages to lie flat for display purposes. The dark colors are recommended because they reflect a business-like presentation and are less likely to show dirt. The pockets on the inside surface of the book cover provide space for storing a few of your SOE program brochures and business cards. The transparent plastic pages allow pictures and other items to be displayed clearly and withstand hand smudges and liquid spills. Tab divider pages allow the teacher-coordinator quick access to sections of particular interest during the informational presentation. Having a neat, well organized portfolio is always more impressive to potential employer-trainers than pulling photos out of a wallet or a well-worn folder.

Assembly

Once you have made your preliminary selection of photos, try putting them into categories. This is where tab divider pages can be helpful. Suggested divisions, contents, and numbers of pages are listed below:

1. Introduction (2-3 pages)
   a. Statement of program goals and objectives
   b. Advisory committee photo
2. Program shots (2-5 pages)
   a. Classroom Laboratory
3. Placement program (2-4 pages)
   a. Placement sites and student-learners
4. TJTC (1-2 pages)
   a. Concise summary of the Targeted Jobs Tax Credit for employer-trainers (The Revenue Act of 1978)
5. Other (2-4 pages)
   a. Newspaper clippings about SOE program
   b. Graduates in permanent job placement

The above have proved to be workable in other situations and for various purposes. However, these suggestions are not meant to be all-inclusive.

It is a good practice to allow only one photo per page, and avoid front to back displays. One photo per page enables the teacher-coordinator and the prospective employer-trainer to focus on one item at a time. Written explanations should be kept to a minimum. Present one concise idea per page in an uncrowded fashion that is easily read. Typewriter print elements or ORATOR (IBM) or other large print, such as the primary style typewriter used in elementary schools, are excellent for this purpose. Rub-on transfer letters also are applicable in this case. Photos and printed pages may be displayed side-by-side, if needed.

Getting the Picture

For the on-going SOE program, the best advertisement is to present pictures of (1) current student-learners at their work stations or with employees and trainers, and of (2) program graduates in permanent job placements. Also, credibility is added when a picture of the current program advisory committee is included in the bragbook.

The 35 millimeter (35mm) or other popular size print film is recommended. The photos chosen for display should be either 8 x 10 inch or 5 x 7 inch. Detail is easier to see on enlargements. Negatives yielding a square picture may be appropriately shaped after special instructions on cropping and such are given at the time of reprinting. Photographs may be black and white or color, although, color seems to leave a more vivid impression with the potential employer-trainer. Not only the color, but the subject matter determines the kind of imprint left with the viewer.

The selection of shots should represent the variety of placement situation within your program or department. The majority of the photographs should be of a candid nature, because they show activity. Viewing a series of pictures of "tin soldiers" is very dull, indeed. Why not try different camera angles and close-ups, for example. Sit on the floor or stand on a work desk to get that special shot. Get a variety of perspectives in your collection. Avoid crowding the scene with people and things. Enlist the assistance of the photography or art teacher for compositional pointers, if this is not your area of expertise.

Formative Evaluation

Throughout the stages of planning and developing the bragbook, you can benefit from the ideas of others, especially if those with whom you consult have advertising expertise and know what sells in your community. Once the bragbook has been assembled, it is a good idea to test it for effectiveness. Seek the opinions of significant other people, such as parents, fellow teachers, advisory committee members, and employer-trainers. Determine how such people react to the book. Be open to suggestions for improvements. However, the ultimate decision on the make-up of your bragbook must be your own.

Summary

The bragbook has a myriad of uses. It can be a very effective aid in shaping the impressions formed about your SOE program and of vocational agriculture. It may be a determinant in an employer decision to participate as a student trainer.

Compact and portable, the bragbook can be taken anywhere. It is relatively inexpensive, easily made from materials common to the department, and can be tailored to suit specific audiences and occasions. The planning and developing phase present excellent opportunities for other people to become involved and to learn about your programs.

A well chosen set of candid photographs representing your students in various perspectives and settings should be an integral part of your public relations plan. The manner in which people think about and react to your educational occupational experience, and youth organization programs depends on the information and the method you elect for presentation. A well organized public relations plan should incorporate a bragbook for your school and community.

ARTICLE

Placement: A Great Place to Start

By James D. White and Tony Smith

(Editor's Note: Dr. White is an Assistant Professor in the Department of Agricultural Education and Mr. Smith is a Graduate Assistant in Agricultural Mechanics in the Department of Agricultural Engineering at Oklahoma State University, Stillwater, Oklahoma 74078.)

SOE expereiences in vocational agriculture are essentially two types, placement and ownership. The theme we address here is placement which in many cases eventually leads to entrepreneurship. Development of SOE opportunities should allow for practical application and flexibility to meet student needs. Characteristics of well rounded student SOE programs should include the importance of quality, appropriate experiences with regard to profitabilty, realistic in terms of employment opportunities and a planned sequenced instructional program that meets the needs of students and community.

Learning By Doing

The potential for success or the risk of failure is nowhere greater than with SOE placement programs. Emphasis of the total program becomes paramount when one considers the effect of classroom and laboratory instruction, practical FFA activities and practice through SOE. This further points out the need for a coordinate total program and the importance of the relationship between classroom, FFA and SOE activities. Some may consider this to be repetitious, however, if students are to become proficient in a skill(s) area and able to perform satisfactorily as an employee, then practice is a must for learning skills that affect both job satisfaction and employee retention.

Community Support

An essential ingredient in any program with emphasis on placement is community involvement. The groundwork for quality student experiences in placement begins with teacher/community relationships and the challenge of locating training stations where employers are interested in students and their progress. This kind of relationship between teacher, student, employer and parent promotes a greater understanding of business practices, skills needed to meet employer expec-

tations and general goodwill between school and community.

This is particularly true in many small communities. Students are not only learning responsibility and developing skills, but have the opportunity to show the public they are productively making worthwhile contributions. When community business leaders understand that vocational agriculture programs are serious about their students developing skills that contribute to the general welfare of all concerned, then few will hesitate to become involved and will offer their assistance.

The Curriculum

The philosophy of vocational agriculture and the major objective is to assist students in developing agricultural competencies and skills that lead to gainful employment. Competencies learned through SOE placement experiences provide a foundation for other areas within the curriculum. It has been noted that students learn more effectively when learning builds on something they already know. The more often they use a skill/competency the longer they retain it. These two points alone should indicate that practical learning activities are essential to the success of vocational agriculture though the program's basic components/classroom instruction, FFA activities and SOE programs.

A curriculum that emphasizes placement should take into consideration the need for orientation to create an awareness among students of the requirements of an occupation in addition to the career opportunities present. Furthermore, the development of human relations and leadership skills along with agricultural competencies enhances the students' productivity and chances for success.

Opportunities in placement broadens the scope of SOE through production, agribusiness and directed laboratory experiences. Placement programs should be of sufficient scope, quality and duration to allow the student to develop a variety of agricultural competencies as well as developing first hand knowledge of business/production cycles. Placement experiences may include SOE opportunities in all taxonomies of vocational agriculture.

FFA activities developed on a solid foundation of classroom and SOE activities/experiences should bring out the best in every student. The competitive nature of many FFA activities may stretch the imagination and enhance the maturity of many to develop traits of perseverance and resilience.

This past summer during the State FFA Presidents' Washington Conference, President Reagan reiterated what many of us already knew, "The Future Farmers of America does more than give a good start to some fine young people." The desire to excel, to become all one can be, is an attribute that many derive from the program, one which few others can match much less claim.

Supervision

Supervision maintains or improves the learning process and develops practical training programs which are realistic in terms of each student's occupational objective. Supervision of students should be a planned instructor activity that is student centered.

To say the initial contact between teacher and the training center cooperator is important is a gross understatement; the teacher/cooperator relationship is of a vital nature if the best interest of the student is to be served. Teachers and students should plan their visits to training centers with the cooperator to discuss opportunities, expectations and areas of responsibility.

The student/owner-cooperator interview should be conducted privately to work out the details of the training agreement. The results of the meeting can be beneficial for student and cooperator in being able to come to a fair and equitable agreement which is satisfactory to both parties. The training agreement, a two part document stating the purpose and details of the agreement, is signed by the student, employer, parent and teacher. It includes a training plan to describe the activities and responsibilities of the student.

In addition, the training plan should include the skills and duration that trainees are expected to spend within each training area/activity. The plan should also include criteria for evaluating the students' performance by the teacher and owner-operator. While the student has an obligation to perform at his/her capabilities and to develop as many skills as possible, the teacher and owner-operator have the responsibility to insure the student's safety.

Furthermore, the teacher and owner-cooperator are accountable in terms of providing experience opportunities that offer the potential of assisting each student to achieve his/her career goals. Experience opportunities should also offer a complete cycle of production/business or lab activities that insures students the chance to perform entry level job skills.

Bridging the Gap

Present economic conditions in agriculture emphasize the need of a total program concept where students have opportunities to develop skill levels that prepare them for the world of work. Placement experience opportunities may provide the bridge for students to narrow the gap between just having a job and developing the competencies that offer the potential of a management position, or maybe, just maybe, a piece of the action as a partner of the owner of the firm. As is said in real estate: "Your not just buying a house on a lot, you are investing in a home on a little piece of America."

If we as a nation are to regain our self-respect with regard to productive efficiency and old fashion American ingenuity, then the work force must be prepared to compete. This underscores the necessity that all of us must work harder and more intelligently at every level of production to achieve a sense of economic growth and direction for the sake of our nation.

Coming in June . . .

SOEP: RECORD KEEPING

BOOK REVIEWS

ECONOMICS FOR AGRICULTURALISTS: A BEGINNING TEXT IN AGRICULTURAL ECONOMICS, by John Sjo. New York, NY; John Wiley & Sons, Inc., 1976, 232 pp., $19.95.

ECONOMICS FOR AGRICULTURALISTS was written specifically as an introductory, college-level text in agricultural economics. The anticipated student population includes persons with either rural or urban backgrounds. Therefore, information presented throughout the text progresses from the most basic understandings to application of complex concepts.

The 18 chapters are divided into seven topical areas. Chapters 1 and 2 provide a brief overview of the scope of economics and the structure of agriculture. Material presented in these chapters provides the basis for many concepts developed in later chapters.

Parts II and III present a discussion of the concepts of supply and demand in terms of micro-economic theory. Graphs and tables are included to illustrate many points.

Markets and price determination is the focus of Part IV of the text. Specific topics include the structure and function of markets and the role of prices in marketing. Pricing theory is examined under both perfect and imperfect competition assumptions.

Part V of the text introduces the role of the manager in an agricultural business and reviews the types of business organization. Advantages and disadvantages of each business form are listed.

Chapter 15 introduces students to important interrelationships between U.S. agriculture and the rest of the world. Problems with food shortages in various countries are identified and population and food policies discussed.

Part VII of the text focuses on problems facing U.S. agriculture and government policies which have an impact on agricultural production. Specific topics discussed include: The Futures Market, Energy, International Trade and Taxes.

Terms which are introduced in the text are defined in italic typeset which adds to the readability of the text. Also, the content of each chapter is frequently divided by topical sub-headings printed in bold type which facilitates use of this book for reference purposes. The author appears to have been successful in developing a book which is well-adapted to teaching students economic principles applied to agriculture.

Bob Birkenholz
Johnson County Community College
Overland Park, Kansas

SUPERVISED OCCUPATIONAL EXPERIENCE MANUAL by Merle A. Cerwin, Greely, Colorado: Interstate Printers and Publishers, Inc., Second Edition, 243 pp., $4.50.

This book is a good reference manual for instructors when dealing with students in the area of SOE. It is divided into the four areas of: 1) Supervised Farming, 2) Co-op, 3) Farm Placement, and 4) Laboratory. Most of the emphasis and information is on supervised farming and co-op.

This manual has a very extensive and detailed table of contents which allows quick and easy access to information and charts within the manual. The numerous (98) charts and tables are by far the highlight of this manual. They give both the instructor and the students a quick reference to good general information on all facets of SOE.

The following are a few charts that are included in this manual: Costs of Raising a Dairy Heifer from Birth to 6, 12, 18, and 24 months of age; A Percentage Breakdown of Total Costs of Operating Various Types of Machinery; Feed Requirements; Organic Matter and Nutrients in a Ton of Excrement; Gestation, Lactation, Water Requirements, Loading Capacities and Space Requirements for Livestock.

SUPERVISED OCCUPATIONAL EXPERIENCE MANUAL is a very good reference for freshman and sophomore students when planning SOE programs. It contains information on budgeting a project, planning supplemental and improvement projects, and analyzing the project supplemental and improvement projects and analyzing the project record books. It is also filled with information useful in managing the student's SOE projects.

James R. Fink
Egan Consolidated Scools
Egan, South Dakota

WANTED: Book Reviewers

One of the services that THE AGRICULTURAL EDUCATION MAGAZINE provides for its readers is the review of publications that address agriculture and agricultural education. The Book Review Editors receives current publications from over 50 publishers in the United States and from some foreign countries. Current topics range from ADMINISTERING AND SUPERVISING OCCUPATIONAL EDUCATION to WEED SCIENCE.

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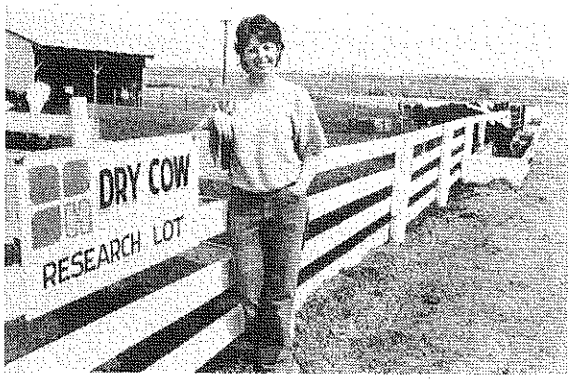
Stories in Pictures

Learning Through Cooperative Programs

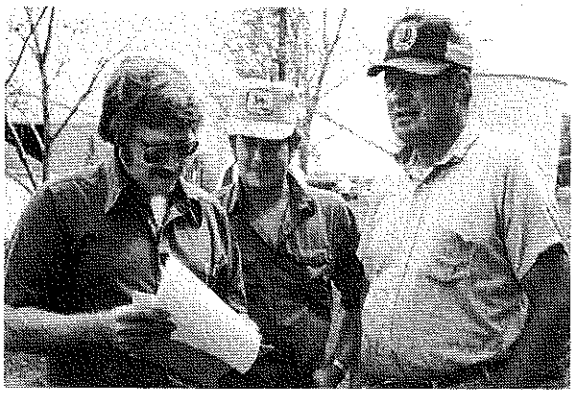
New product research and development provides experience for students in Food Technology program.



A student completed her internship assignment by serving as an assistant manager of the dairy research herd for a feed company.

Employer working with Agricultural Production students involve the student interns with the record management practices used on the farm.

Horticulture major in landscape maintenance discusses proper management of greens with the course superintendent.



Faculty supervisors must meet periodically with students and their employers to assess the progress students are making.

Growing bedding plants for retail sales provides an opportunity to practice new skills gained on-the-job.

(Photographs courtesy of Duane Kaas.)