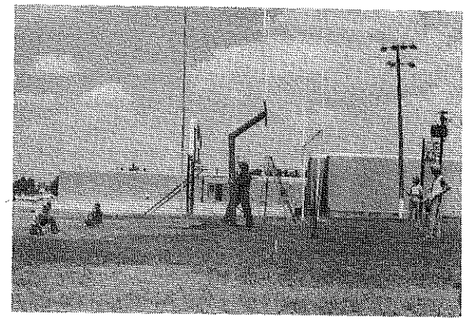
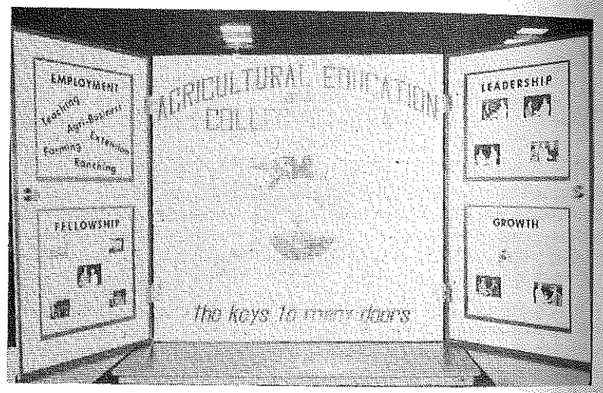
STORIES IN PICTURES

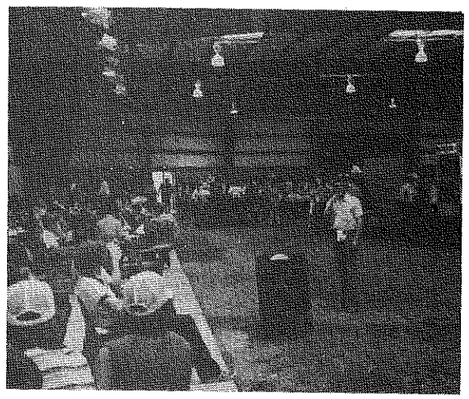
by Joe Sabol

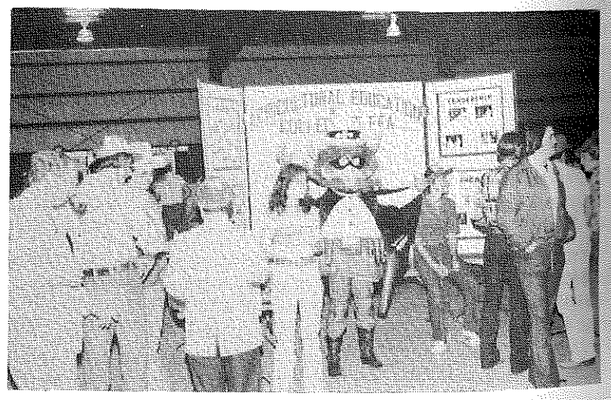
Mark Baker, State FFA President from Texas, accepts signed proclamation from Governor Bill Clements proclaiming National FFA Week as Mr. J. A. Marshall, Director, Agricultural Education, looks on.



The BOAC Program, as well as other individual chapter projects, provide many FFA chapters the opportunity to "give back" part of what so many individuals and communities have given to the FFA. Pictured above are members of Booker FFA Chapter, Booker, Texas, setting up playground equipment.







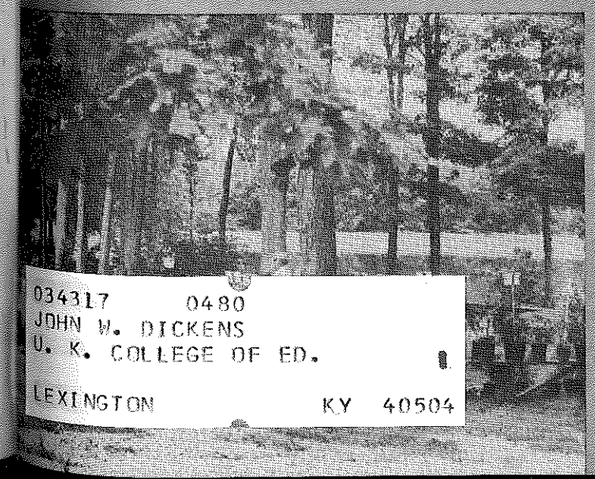
Universities must become involved at the grass roots level also. Pictured are photos of a free hamburger feed for FFA members, parents, vo-ag teachers, administrators, and other friends who are attending the Texas Tech. University Judging Contest in Land, Range & Pasture, Cotton, Meats, Livestock, Dairy Cattle, Milk Quality, Wool, and Agricultural Mechanics. Over 2,000 hamburgers were fed while visitors were invited to visit booths arranged by each club in agriculture and to visit with faculty and college students. (All photos courtesy of Marvin Cepica, Texas Tech., Lubbock, Texas.)

FEATURING —
- GIRLS IN THE PROGRAM
- URBAN POSTSECONDARY AG
- SPECIAL NEEDS TEACHER ED
- INTERNATIONAL OPPORTUNITIES
- SHORT METAL STORAGE
- FLEXIBLE RECORD-KEEPING
- GRANDATHER'S COLLECTION

AGRICULTURAL eDUCATION

Volume 52 Number 5

November 1979



Theme — Adult Education In Agriculture - An Extension Of Our Vo-Ag Program

November 1979 Volume 52 Number 5

AGRICULTURAL EDUCATION

THEME — Adult Education in Agriculture - An Extension of Our Vo-Ag Program

COVER PHOTOS

TOP PHOTO — *Adults can learn by doing too! These teachers of vocational agriculture from Mexico are learning new veterinary skills during a six week in-service workshop held this past summer at Cal Poly, San Luis Obispo, California. (Photo courtesy of Mr. Ed Apodaca of Vocational Educational Productions, Cal Poly, San Luis Obispo.)*

CENTER PHOTO — *Young and adult farmers with their wives in Sylvester, Georgia, enjoy their Annual Banquet. After the meal, they listen to a speech dealing with many of the problems they face by Mr. M.C. Blount, Professor of Agronomy at the Fort Valley State College. (Photo courtesy of Dr. Ira Hicks, The Fort Valley State College, Fort Valley, Georgia.)*

BOTTOM PHOTO — *Indiana Vocational Agriculture teachers learn more about horticultural plant identification during the summer workshop. The IVATA plans and conducts the 2-day summer workshop. (Photo courtesy of Dr. Gary Moore of the Purdue University Agriculture Education Department.)*

AGRICULTURAL EDUCATION (ISSN 0002-144x) is the monthly professional journal of agricultural education. The journal is published the THE AGRICULTURAL EDUCATION MAGAZINE, INC., and is printed at M & D Printing Co., 616 Second Street, Henry, IL 61537.

Second-class postage paid at Henry, IL 61537.

POSTMASTERS: Send Form 3579 to Glenn A. Anderson, Business Manager, 1803 Rural Point Road, Mechanicsville, Virginia 23111.

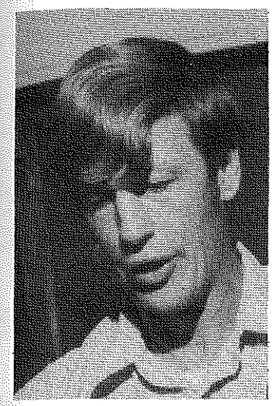
Send articles and pictures to the Editor or to the appropriate Special Editor.

SUBSCRIPTION PRICE: $7 per year. Foreign subscriptions $10 surface mail, $20 air mail (except Canada). Student subscriptions in groups (one address) $4 for eight issues. Single copies and back issues less than ten years old are available at $1 each. All back issues are available on microfilm from Xerox University Microfilms, 300 North Zeeb Road, Ann Arbor, Michigan 48106. In submitting subscriptions, designate new or renewal and address including ZIP code. Send all subscriptions and request for hardcopy back issues to the business manager: Glenn A. Anderson, Business Manager, 1803 Rural Pt. Rd., Mechanicsville, VA 23111.

GUEST EDITORIAL

GUEST EDITORIAL

IT WILL WORK!!



James A. Woodard

By
James A. Woodard
Vo-Ag Teacher
Alden Central School
Alden, New York

When adult education is mentioned to an ag teacher, what thoughts immediately pass through his/her mind? How can I manage an increase to my already hectic and overextended work load? Where can I fit in another night out to an already full evening schedule? Can I meet the needs and find the answers for these adults who have specialized in selected areas of agricultural work? These are some of the thoughts that I experienced five years ago when our ag department first considered starting an adult education program.

If you are an ag teacher or administrator, and have never considered an adult education program in agriculture, I would like to share how our ag department arrived at the decision to start this program. I will also discuss what we have seen after three years that has been beneficial to the students, the school and the overall ag program.

NEED

While teaching in a conventional high school program for five years, I observed the following situations which indicated to our department a need for an adult education program in agriculture.

1. The large majority of students who went through our ag program, and then went into farming in our community, did so with no further training or education. We found in surveying our ag students, who graduated in the previous four years, some interesting trends. Those who went on to two or four year colleges almost exclusively went into agricultural related jobs rather than becoming farm managers or owners.

2. Students who went into farming in the community would come back to the ag department often with questions about contracts, income tax, bookkeeping procedures and marketing methods. Our library was constantly raided for any new material on these subjects. Graduates would come to our shop after school to use the facilities for repair and maintenance of equipment.

3. The extension service in our county experienced some drastic cuts in their budget and many agents were laid off or retired. This caused many of the programs to be eliminated, or combined with other counties, discouraging overall participation due to travel distance and time. Many of these programs were especially helpful to the young farm manager or farm owner because they relayed the latest information on tax laws, depreciation methods and marketing trends.

4. We surveyed the agri-business men of our school district and asked them if they thought there was a need for an adult agricultural education program. All those surveyed were very positive about such a program and promised their support both physically (attending meetings) as well as committing their resources (specialists) to help in conducting the classes.

We took the above information to our administrators and received their support and commitment of facilities for the program.

BENEFITS

Most people take on extra work and responsibility with the expectation of seeing some beneficial results. Educators are no different, except their results are often much slower in materializing. Our ag adult program has only been in effect for three years, yet we have seen a number of benefits.

1. Adult students have benefitted from the shop and classroom instruction. They tell us their recordkeeping systems and income tax records have been greatly improved. It seems there is a much greater incentive for a person to concentrate on keeping a good set of records, when he/she knows these records might mean the difference in getting a loan to buy more land, cattle or equipment.

Another area where students feel they have benefitted is in the repair and maintenance of farm equipment and machinery. Farmers have to do more of this type of work to cut down on high labor and machinery costs.

2. The school and community have been brought together through vocational occupations (farming) with a chance to share ideas through a successful adult program. Community farm leaders have become more outspoken concerning local educational programs and priorities. We, as teachers and representatives of our school, are able to answer questions and inform these adults on the many problems facing local education. This improves school community relations and gains the sympathy for budgets (so often needed) along with sound educational programs.

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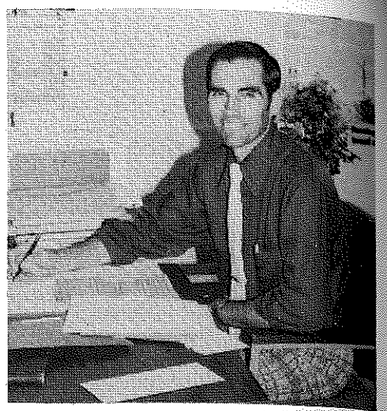
EDITORIAL —

ADULT EDUCATION THE DIFFERENCE?



James P. Key

Some Ag teachers may consider the adult education part of their program just one more of those many duties they can't seem to find time to do. Some consider it a burden which adds to their overworked status. Others, however, consider adult education the best thing that ever happened to their program. Some say their adult education group is the best group of supporters their program ever had. What's the difference?

The main difference I have been able to see is that the first group of teachers treat adult education as just one more class they have to teach or duty they have to perform. Whereas, the second group of teachers see adult education as an opportunity to keep in touch with changing agriculture, to help a group of their community supporters organize to continue education in agriculture, and to gain a group of helpers who can help prevent that teacher from becoming overworked. Why this difference?

The first group apparently feel they must teach any adult classes offered and this just adds one more preparation for them. The second group of teachers apparently feel they and the adults can organize to bring in outside resource persons or utilize the expertise within the group to keep in touch with changing developments in agriculture. Most have also experienced the fact that this organization, be it young farmers or other adult education group, usually takes on projects to help the ag program, such as building facilities, providing equipment or taking students to different events. In addition the teacher keeps better in touch with the community, its needs and resources through the adult group.

Since the Smith-Hughes Act, adult education has been considered an integral part of agricultural education. Those far-sighted founders of the program saw the need for continuing education for program completers. Perhaps they did, or did not, see the added advantages of program support and continuing education for the teacher. Either way, the teacher who develops adult education as a part of the program almost always realizes these added advantages, without really planning for them. — Ed.

AFTER OCT. 1 SEND ALL ARTICLES TO: **Dr. Jasper Lee, Head, Dept. of Ag. & Ext. Ed.**
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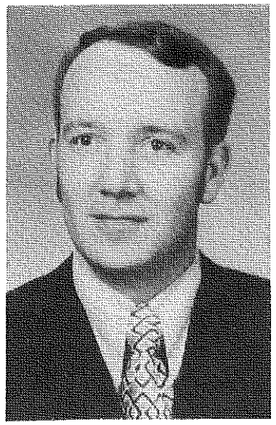
(Please submit articles 2½ months in advance of Theme to allow publication time.)
(Please submit 2 copies of your article. Thanks!)

COMING ISSUES COMING ISSUES COMING ISSUES COMING ISSUES

DECEMBER — Horticultural Occupations — Learning to Beautify
JANUARY — The New Decade
FEBRUARY — Funding the Local Program
MARCH — Making Vo-Ag Relevant to the Needs of Agricultural Industry
APRIL — Basic Competency Programs
MAY — Experiential Programs
JUNE — Summer Programs
JULY — Technology in Agricultural Industry
AUGUST — Using Realia in Instruction
SEPTEMBER — Safety Education
OCTOBER — Programs in Animal Agriculture
NOVEMBER — Programs for Exceptional Students

Adult Education: Growth for Vocational Agriculture in the Eighties

By
Larry E. Miller
Teacher Educator
The Ohio State University



Larry E. Miller

Continuing education in agriculture has traditionally focused upon the young and adult farmer. Lyceums, fairs, institutes, chautauquas, meetings, workshops, courses and institutions have been established to provide for the educational needs of farmers. This educational emphasis is justified and has grown to be an important segment of vocational education in agriculture. But, just as the profession wrestled with the scope of the agri-industry in 1963, so now should we consider the scope of continuing (adult) education in agriculture.

PROGRAMS NEEDED

The future of vocational agriculture may hinge heavily upon the readiness of the profession to change and expand the continuing education portion of our program. The decline in secondary school enrollments will make vocational agriculture at the high school level hard-pressed to provide year-by-year growth in the next decade. Many would maintain that quality and not quantity should have been the standard during the past two decades when sheer numbers seemed so important. Regardless, a multitude of opportunities exist for progressive instructors that broaden their definitions of vocational agriculture to include continuing education and expand continuing education to envelope the agri-industry. Any school district that can justify a high school program of vocational agriculture for a taxonomy area can undoubtedly justify a continuing education program in the same area.

Present legislation describes vocational education as "... training or retraining which is given in schools or classes ..." Nearly a dozen U.S. departments and agencies have over fifty adult education funds. States have formal and informal emphasis placed upon the adult, continuing education, component of education. The need for training and retraining through continuing education is a conclusion not arrived at frivolously. If vocational agriculture does not respond to this need; rest assured others will identify it and expand to serve the agri-industry. Other agencies can and will provide the services and education needed by those in the agri-industry. Vocational agriculture could suffer greatly if forced to serve only secondary level students. Our philosophy of providing for the broader community needs above the secondary level could be greatly diminished.

A vocational agriculture **program** implies that we are serving the educational needs in agriculture in our communities and school districts. A department that bases its program solely at the secondary level is not offering a **program** in vocational agriculture. Continuing education has become the stepchild that is served when and if time is available. Time should not be the deterrent to serving adults. If the high school vocational agriculture enrollment is such that sufficient time cannot be found, then employing another teacher may be justified. Departments with low secondary enrollment may find salvation in adult education wherein a teacher may continue to make vocational agriculture available to high school students by supplementing the enrollment with adults.

QUALITY PROGRAMS BENEFICIAL

Quality must be the watchword in adult programs. Programs must meet the needs of the agri-industry. A thorough analysis of those needs should be made upon which to frame the instructional program, and continuous evaluation should occur. A distinction should be made between service and educational functions. Teachers should build their program around sound educational objectives to fulfill educational needs and negate the myth that an adult class is: "on Thursday nights I open the Agricultural Mechanics shop for farmers to come in and work." Another continuing problem that seems to emerge is mismanagement of resource personnel. Resource personnel or speakers can be tremendous aids, if managed correctly. However, if specific directions are not provided, and objectives outlined, then a second problem of quality surfaces in which the teacher merely opens the classroom doors, sees to the refreshments and closes up. A third obstacle to quality is failing to provide enough depth in the subject area. This shortcoming is perhaps best characterized by the "shotgun" class that is comprised of a series of "one-shot", shallow topics that have no definite shot pattern. Relevant, substantive instruction is needed if the teacher expects repeaters among the participants.

Lifelong education implies the availability of education throughout one's life span, not just a longer preparation period. Earlier retirements, lengthened

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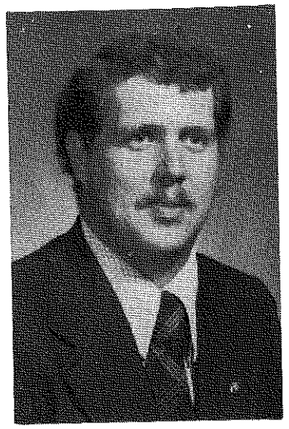


Allen J. Dietz

Young Farmers Association — An Extension Of A Total Vo-Ag Program

By
Allen J. Dietz
Vocational Agriculture Instructor
Sycamore, Illinois

Developing the vocational agriculture student to become the most effective leader that the student is capable of becoming should be the prime objective of a vocational agriculture teacher in the local high school today. I believe that this objective can be met by the use of a local Young Farmers Association as an integral part of the adult vocational agriculture program.

RATIONALE

In many cases, the four years available to train a student into a leadership role in agriculture while he is in high school is not enough time to develop that student to the full extent. Yes, the student may become a State Farmer of the FFA but still there are higher degrees to be obtained in the FFA and further knowledge and skills to be learned in this ever-changing field of agriculture.

There are many purposes and reasons for having a young farmer chapter. The young farmer or agribusinessman has a very unique and difficult situation to contend with, especially in the first several years after graduation from high school. The student has had a set routine, has been planning goals for his future career, has had an advisor very available to answer questions that arise, and has had an organization with which to operate the FFA. Upon graduation, this all changes. He does not see his advisor each day. Goals that he has set can only be accomplished in many cases through obtaining much needed capital. Also, even though he remains an FFA member, he does not have the everyday contact that he had before. I believe that these problems can be overcome by the use of a young farmer chapter.

EDUCATIONAL ACTIVITIES

Activities first of all should be educational so that students can further develop knowledge and skills past the point learned while they were in high school. These educational activities should be matched to the needs of the members of the chapter. Thus planning these activities should be done by the members. If the young farmer needs to know more about farm loans, speakers could be brought in to discuss this problem. If students need to obtain knowledge of some new agriculture process, a farm tour could be organized, or members could attend workshops, institutes, etc. sponsored by the state young farmer organization. There should also be recreational activities so that the entire family can be involved. Do not forget to include the wives of young farmers in the chapter. They can be members as well and in most cases are a full working partner of a farm situation. Public relations should be stressed between rural and urban people, and last but not least, activities should be available for leadership development.

FILLING THE VOID

The Sycamore Young Farmers Association presently is the oldest young farmer chapter in the state of Illinois and had the 1st state president, 1st state secretary-treasurer, and hosted the 1st Ill. Young Farmer Summer Tour. What is unique is that the membership is heavily composed of State and American Degree FFA members. Upon graduation, many of our students while still maintaining their FFA membership, also join the Sycamore Young Farmers and dig right in to become very active members. A void is thus filled in their education and their leadership abilities can be further developed and refined.

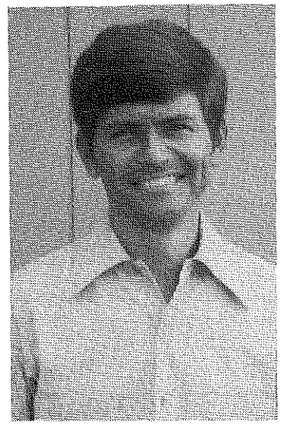
Thus the Young Farmers Association at Sycamore is highly successful in strengthening the FFA; in furthering the development of students into American Farmers; and then in continuing to improve the abilities of our young farmers/agribusinessmen in their selected careers.

SUMMARY

Yes, being an advisor of a young farmer chapter does add additional work to an already very busy schedule of a vocational agriculture teacher. However, I believe that a young farmer chapter is essential in order for one to have a total quality vocational agriculture program.

EDUCATING ADULTS YIELDS HIGH RETURNS TO VO-AG

By
Phil Grady
Vo-Ag Teacher
South Granville High School
Creedmoor, NC



Phil Grady

Do you ever ask yourself, Why should I have an adult education program? What good will it be for them and me? Do I really have the time for such a program?

I want to share with you some ways my adult general agriculture subjects classes and specialized agriculture skills classes help my adult and high school students, the total school program, and me.

ADULT BENEFITS

Adult class members share personal experiences and knowledge before, during, and after meetings. They talk informally with the speakers about problems of special interest to them. Class members get to know each other better. They become better acquainted with people with whom they do business, because many of our 55 class members work full-time in agriculture businesses which serve our community. Obviously, they are exposed to many improved farming techniques and ideas presented by the agriculture extension speakers. The adults also learn and develop many hands-on skills in the specialized skills courses.

H.S. STUDENT BENEFITS

The adult students are involved in farming and agriculture businesses that provide excellent training centers for vo-ag classes in mechanics, crops, livestock, horticulture, and chemicals. I like being on a first-name basis with these businessmen because it is much easier to arrange community field trips. These adult students and friends of the school provide such teaching aids and materials as miscellaneous timber stock for construction, saw dust, shavings, and pine bark for horticulture teaching needs. Some of our adult members are 2-year and 4-year graduates of North Carolina State University. They provide excellent career orientation information and advice to the high school students.

Many of our young farmers are graduates of our vo-ag high school program. Our post high school adult classes offer a rewarding follow-up program for them and me. The improved farming techniques that I observe on farm and agriculture business follow-up visits provide excellent ideas to share with high school and adult students.

VO-AG TEACHER BENEFITS

I can provide numerous local examples of agriculture because of my direct contact with many varied agriculture occupations in the community. My work with farmers and other landowners concerning state and federal farm programs provides experiences and career information to share with high school students. For example, my involvement with public and private forestry professionals has helped to provide students with assistance in several reforestation projects. Some of our adult students are retired farmers, soil conservationists, and federal farm program leaders. They serve very well as valuable resourses for high school classes. My contact with varied people and improved techniques and practices provides me with annual renewal experiences in the field of agriculture.

TOTAL SCHOOL BENEFIT

Some of our adult class members are county leaders in agriculture conservation, county commissioners, and county school board members. They can be of tremendous value to our local school because of their close relationship to its programs, activities, and needs. Many of our member farmers and agriculture businessmen provide incentive awards and monetary contributions to the total school as well as the Future Farmers of America at our school.

SUMMARY

I believe I know and appreciate my community better by being directly involved with my adult class members. I do see a great need for the continuation of our program because of the ever increasing need for better management in production and agriculture businesses closely related to production. I do not believe that the pressure has ever been any greater on farming than it is today. I think some of the same types of unrealistic pressures being placed on production agriculture are being placed on us in vo-ag teaching. We have got to have adequate time available in our work day to plan and coordinate this essential program and resource.

I would like to include a typical meeting schedule to illustrate the kind of program we have at our school.

GENERAL SUBJECTS CLASSES
(7:30 - 9:00 P.M.)

Oct. 19 — Fall Kickoff Supper

Nov. 2 — Plant Bed Production Through Layby (Tobacco)

Nov. 16 — Soybeans - Land Preparation, Chemical Weed Control

Nov. 30 — Tobacco Varieties-Disease, Pest Control

Dec. 14 — Crop Irrigation-Update

Jan. 4 — Tobacco Situation

Jan. 18 — Farm Tax and Record Keeping

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CONTINUING EDUCATION THROUGH WORKSHOPS

By
Delroy L. Hemsath
Chairman, Production Agriculture
University of Nebraska School
of Tech. Agriculture
Curtis, NE

Delroy L. Hemsath

Renewing friendships, making new friends, and learning about the latest technologies are all part of the Production Agriculture Graduate Workshops held at the University of Nebraska School of Technical Agriculture (UNSTA) in Curtis, NE. This article deals with the steps followed in establishing an adult workshop for the graduates of UNSTA in the Production Agriculture Program.

Starting in 1977, the Production Agriculture Department decided to begin an annual workshop for graduates of our program. Events leading to the decision were:

1. The fairly large number of graduates from our program.
2. Changing technologies in agriculture.
3. The expressed desires of the graduates to have a workshop.

With these things in mind, the department decided to conduct a workshop in January of 1977. A date for the workshop to allow the graduates to attend was a basic consideration in the initial planning. A winter date was preferred since those in attendance were farmers and/or ranchers.

PLANNING

Finding a topic of interest for the graduates was the next step. After seeking advice from instructors at UNSTA, the department's advisory committee, and graduates of Production Agriculture, two topics were picked. One of them dealt with farm income tax laws and the second dealt with partnerships and corporations. A representative from H & R Block handled the income tax portion and a panel made up of area farmers handled the partnerships and corporations. There were 44 graduates that responded by attending the workshop, which was considered a success and even exceeded our expectations. Every graduating class was represented by those in attendance, which made it that much more of a success.

A survey was given to those attending the workshop asking them for future topics for workshops. Some of the more popular topics were: marketing techniques, machinery trading, cow-calf management, energy, insurance, and market cattle management.

In 1978, using the survey of possible topics, a workshop was held which dealt with marketing, futures and hedging. About 35 graduates attended the workshop, even though the weather created some problems by keeping many from attending. In 1979, the workshop dealt with farm machinery buying, selling and financing. The 1979 workshop was held on Saturday, rather than during the week, and at the same time as the Veterinary Technician workshop for Veterinary Technology graduates of UNSTA, to see if there would be a better response. As a result, there was increased attendance to 48, which was the greatest response for any of the three years.

RESOURCES

The workshops made use of resource people working in agricultural industry to expose the graduates to new and current ideas and to provide opportunities to establish future contact people. Some of the resource people came from the extension service, area farmers, small corporations, financial institutions and private businesses. Most did not request any reimbursement for travel or time which made the cost of the workshops very reasonable. Instructors at UNSTA were not involved except in the planning phase of the workshops.

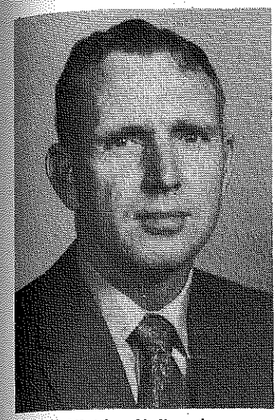
CONSIDERATIONS

Financially, the workshops are self-supporting. Each attending graduate is assesed a minimum registration fee to cover paper, refreshments, and any mileage costs for speakers. This has provided the department with adequate funds and a chance to bring in some high quality people. Facilities did not add any cost to the workshop since the workshops were located in the Production Agriculture-Veterinary Technology Building on UNSTA campus. Meeting rooms are conducive to learning since the rooms are used for regular classes during the school year. Meals for those attending the workshop can be obtained through the cafeteria located on campus which makes it very convenient for those attending.

In the future, the department would like to expand the workshops to include a key-note speaker from the agri-industry as an inspiration to the graduates.

Graduate workshops are a vital part of continuing a farmer/rancher's education. They are vital because of the great demands put on those producing food and the lack of time to educate themselves to meet those demands. Going back to college for one day to get new ideas, meet old friends, establish new contacts or recall the fun times of school all go together to make this type of activity a natural and needed commitment for UNSTA and Production Agriculture.

FROM RELUCTANCE TO REWARD



Weldon Holbrooks

By
Weldon Holbrooks
Teacher of Vocational Agriculture
Stamford, TX

It was July 1, 1949, and my first day on the job as vocational agriculture teacher of Wharton High School in Wharton, Texas, when I received a telephone call from a farmer who needed help with a bloated cow. As I listened to his problem, the seed of panic was planted and began to grow inside me as the farmer gave me directions to his farm. In stating my estimated time of arrival to his farm, I was careful to allow myself plenty of time for research on the subject. A former vocational agriculture teacher who had taught in Wharton and who still lived in the community came to mind, and in minutes I found myself in his driveway. As I explained the situation to him, he listened very patiently and then revealed to me that he was the farmer who had called. The dilemma ended. It had been a prank, yes, but a very realistic one.

Why had I panicked? It was because of the lack of experience I had in actually treating a cow for bloat. I had the book knowledge, but I had never had to put that knowledge to practical use. Likewise, I had the instruction necessary for organizing adult farmers into a group for the purpose of education. I knew all the reasons for having such a group, and I knew how to go about organizing one, but I was not ready to put that knowledge into practice.

RELUCTANCE

Why was I so reluctant to form an organization for adults and to include adult farm education in my vocational agriculture program? The root of my reluctance was my lack of experience in dealing with adults. The whole idea frightened me. I was afraid the farmers would not be interested in learning new methods of farming or in trying to incorporate new ideas into their usual methods. Listening to the experiences related to me by other teachers regarding work with farmers added to my fear. I worried that I would be unable to present programs that would be of interest and of benefit to the area farmers, even if I succeeded in forming an educational group. I also worried that I would be unable to answer the questions that might arise in a meeting of adult farmers, and I felt incapable of assisting farmers in making decisions regarding their farming methods.

When I accepted the position of vocational agriculture teacher at Stamford High School in Stamford, Texas, the executive of the Young Farmers Association of Texas visited with me one afternoon about organizing a group of young farmers in Stamford. He gave me all the details and told me what I would need to do in order to call my first meeting with the farmers of the community. After deciding on a date for the meeting, I began to make a list of former vocational agriculture students and their fathers who were farming in the local area. I added the names of other farmers of the community with whom I had become acquainted, and then letters announcing the meeting were mailed to each farmer on the list.

ORGANIZING

The executive secretary of the state organization returned to Stamford to attend the meeting, and he discussed with those present the Young Farmers group. They then elected a temporary chairman, appointed a constitution and by-laws committee and set a date for the next meeting.

The second meeting of the farmers saw the adoption of the rules and regulations presented by the constitution and by-laws committee and the election of the first officers of the Stamford Young Farmers in keeping with the provisions of the newly formed constitution. The officers included a president, vice-president, secretary-treasurer, and reporter. Those elected would serve one year terms and could be re-elected for another term. The constitution provided for the payment of dues by the members and stated the purposes of the organization. It also set forth guidelines distinguishing active members from associate members. The active members would be those between the ages of 19 and 35 while the associate members were those over 36 years of age. The active members were eligible to hold office in the organization and to vote. The associate members were entitled to all other rights and privileges, including the right to attend all meetings, to work on all projects undertaken by the group and to be included in all recreational activities.

Education was the main purpose of the organization, and education has remained the focal point. Time is taken during the September and October meetings to decide on the educational subjects for the next twelve monthly meetings, to which farmers of all ages are invited to attend. The members suggest topics that they feel will be of interest and of value to the local farming community. After several topics have been listed, a vote is taken on each program. When twelve have been selected, each program is assigned to a month and, in some instances, members are allotted such responsibilities as contacting the program personnel and making all the arrangements for the presentation. The meetings are held on the second

(Concluded on Page 106)

CONTINUED

FROM RELUCTANCE TO REWARD

Monday night of each month, and the group tries not to vary from this night unless the program personnel should find the date inconvenient to their schedule. Programs in the past have been presented by the soil conservation service on improving cotton, milo, and wheat and on controlling insects. There have been short courses on electrical wiring, welding, and tractor maintenance as well as programs regarding beef production and the marketing of farm products. The meetings have also included programs on safety in such recreational activities as hunting and fishing.

REWARD

The Stamford Young Farmers organization has become the core of adult farm education in the Stamford Community and has not become affiliated with any political group, nor has it taken a stand on anything of a political nature. Because of its educational nature, the organization has become an integral part of the vocational agriculture program in the high school. By providing practical views of actual problem areas in the local farming community, the adult program assists me in deciding what special points I need to emphasize in my high school classes. The Young Farmers also provide some funds for the high school program. They furnish the star awards each year at the local Future Farmers of America banquet. The group makes annual donations to the local livestock show, and for the past four years has donated funds to pay the debt on the new show barn. The Stamford Young Farmers are regarded as big brothers by the Future Farmers and many of the members of the Young Farmers have been named Honorary Chapter Farmers by the local FFA Chapter. Through the congenial relationship between the two organizations and the assistance that the Young Farmers provide, the adult group has become an advisory council for the younger program.

Although education is the main concern of the organization, the group has also become the center of recreational activity among the local farm families. The members plan and attend family barbecues, swimming parties, and seasonal celebrations such as Thanksgiving and Christmas. These activities serve as a form of relaxation and as a time for the farmers to get to know one another. The members also attend and participate in agricultural meetings at the area and state levels as a group. All of these activities along with the regular monthly meetings help to promote a spirit of cooperation among the farmers of the community.

This spirit spreads from the farms throughout the rest of the community as the farmers become interested in promoting community improvements. The organization serves as a public relations program for agriculture as the members assist with fund drives and various other charitable programs. The Stamford Young Farmers serve as superintendents and bookkeepers for area FFA livestock shows, and they have taken the lead in raising funds and in planning a new facility for the local and county shows. They have also sponsored a farm equipment sale to aid farmers in moving obsolete equipment.

TEACHER RESPONSIBILITY

It is my feeling that the vocational agriculture teacher must take the lead in organizing the farmers of a community, not only for their own benefit, but for the contributions they can make to the community. It is the duty of the teacher to attend a majority of the meetings to show his interest in the problems of the farmers and to assist the officers in guiding the program. He should also assist in contacting farmers about scheduled meetings and in enlisting new members. When comparing the benefits the teacher and the community receive from a well-organized group of farmers, working collectively and cooperatively with the duties of the teacher, it seems likely that the benefits are well worth the effort. This has been my experience with Adult Farm Education through the Stamford Young Farmers, and I believe that this can be the success story of any vocational agriculture teacher who is willing to put forth the time and effort to organize the farmers of his community. "From reluctance to reward " . . . This, in very brief form is how Adult Farm Education began and how it has resulted in twenty years of real satisfaction for me with the Stamford Young Farmers.

CONTINUED

EDUCATING ADULTS YIELDS HIGH . . .

Feb. 1 — New Aspects in Tobacco Production

Feb. 15 — Beef and Swine Income

March 1 — Forest Land Management-Reforestation Low Grade Hardwood

March 15 — Economics of Mechanization - How Mechanized Should You Be?

SPECIALIZED SKILLS CLASSES
(One area per year)
(30 class hours)

Tractor Maintenance
Small Engine Repair and Maintenance
Electric and Gas Welding
Electric Wiring
Chemical Sprayer Clinic

DON'T FORGET — NVATA CONVENTION
Anaheim, CA Nov. 30 - Dec. 5

Has Your Ag Program Changed With Enrollment of Girls — SHOULD IT?

By
Thomas E. Klein
Vo Ag Instructor
Marsing, ID

and
Douglas A. Pals
Teacher Educator
University of Idaho

Have you made changes in your vo-ag program to permit girls to obtain an education in agriculture? Does your program discourage girls from entering because of your facilities, curriculum and the all-male traditions of the vo-ag program and the FFA?

Girls have become an increasingly important part of vocational agriculture and the FFA since 1969 when members at the National FFA Convention voted to admit girls to membership in the FFA. Many people held the opinion that allowing girls into the FFA would ruin the organization. However, the results of this study do not support this feeling.

Idaho FFA chapters still do not have large numbers of girls as members. In the thirty-nine departments surveyed in this study the average chapter had 7 girls and 56 boys as members. The data revealed that as the size of the program increases the number of girls that enroll in vo-ag classes or become FFA members increases as well.

PURPOSE AND OBJECTIVES

The study was designed to detect which areas of the vocational-agriculture and FFA programs in Idaho had changed or needed to be changed to make the programs more valuable to both male and female students. The specific objectives of this study were to survey the perceptions of Idaho vocational-agriculture instructors:

1. To determine if the presence of girls in vocational-agriculture programs have required changes in facilities, teaching methods, curriculum, field trips or recreation.

2. To determine the percentage of male and female students enrolled in vocational agriculture and FFA, and determine if any relationship exists between the female enrollment and the size and geographic location of the program.

3. To determine if girls have superior study habits and abilities when compared to boys in vocational-agriculture and FFA programs.

4. To determine if more discipline problems have been encountered in the vocational-agriculture and FFA programs since girls were admitted.

5. To determine if the proficiency levels of FFA contests have been raised or lowered as a result of girls participating.

6. To determine if Idaho vocational agriculture instructors perceive differences in selected traits of male and female students in their individual programs.

METHODS

A questionnaire was developed and mailed to 84 vocational agriculture instructors in Idaho. Forty-four (52.4 percent) useable questionnaires were returned. Respondents were asked to compare boys and girls in their vo-ag and FFA programs on several classroom and FFA questions. The questions included study habits and abilities, student attitudes, discipline, travel, facilities, curriculum, teaching methods, FFA contests and recreation.

FINDINGS

The major findings were:

ATTITUDES

1. Little difference was perceived by vo-ag instructors between girls' and boys' attitudes towards FFA dress, behavior on field trips or trying out for FFA contests.

2. Girls were perceived to have better attitudes towards classroom work than boys.

3. Boys' attitudes towards fair participation were perceived to be more positive than girls.

STUDY HABITS

1. Approximately 77 percent of the instructors indicated girls were better in completing reading assignments.

2. Over 70 percent of the instructors perceived that girls kept more complete notebooks than boys.

3. Seventy-five percent of the instructors indicated boys were better at doing shop projects.

DISCIPLINE

1. Girls were perceived by vo-ag instructors to cause less discipline problems than boys in the shop (61.4%), classroom (65.0%), on field trips (70.5%), and in chapter meetings (81.8%).

2. Instructors indicated they were most concerned with the area of overnight trips when both female and male students were present.

CONTESTS

1. Forty-eight percent of the instructors indicated girls raised the proficiency level of the FFA Creed contest.

2. Between 32-38 percent of the instructors indicated proficiency levels were raised in the public speaking, crops and weeds, meats, dairy products and livestock contests. (In their comments, instructors seemed to agree an explanation for this was because of the competitiveness between girls and boys and not because of the superiority of either sex.)

TRAVEL

1. When asked to respond to changes made in travel plans, instructors indicated they made changes in room assignments, chaperones and trip preparation when girls were involved.

2. Sixty-four percent of the instructors indicated they had not made adjustments in the length of trips when female students were involved.

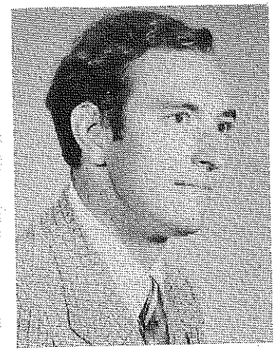
SUMMARY

As changes are made more girls will be encouraged to enroll in vocational agriculture and become active members of the FFA. The results of this study indicate that Idaho vo-ag instructors perceive that girls have had a positive influence on their programs.

FEATURING:

Urban Post secondary Education in Agriculture

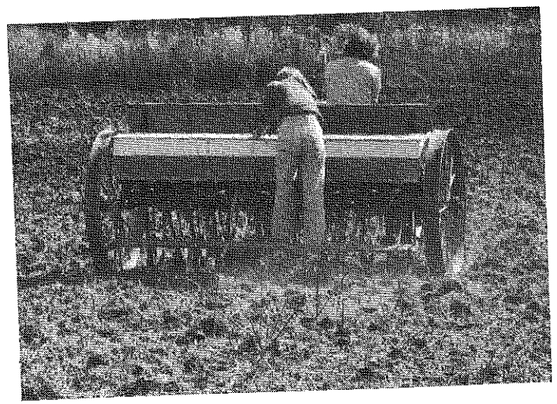
By
Glenn Petrick
Agri-business Instructor
Milwaukee Area Technical College
Milwaukee, WI



Glenn Petrick

With numbers of family farms on the decline, it becomes increasingly difficult to find employees with agricultural backgrounds. This has caused some rather unlikely businesses to suddenly discover how much they depend on people with agricultural competencies. They've also discovered how short the supply of such people is.

Such a moderately large urban center as Milwaukee, Wisconsin may seem a strange place to teach agriculture, but a demand for trained people exists. Businesses like the Port of Milwaukee require people with agricultural knowledge to keep perishable commodities from spoiling in transit. Breweries, malting companies, and grain exporters need workers who have a knowledge of small grains. Large chain type food stores need agricultural people at all levels from procurement of products to marketing at the retail store.



Slaughter and meat packing plants utilize people knowledgeable enough to converse with farmers or business consultants. Chemical companies base field representatives in urban centers to cover the greenhouse and garden center market. The stockyards use people in their daily operation as well as in market data collection and reporting. Brokerage firms need people knowledgeable in agricultural commodities. Sewage treatment plants and area planning commissions work with our environment and with agricultural industries. It becomes hard to think of any large urban business that doesn't have contact with agriculture.

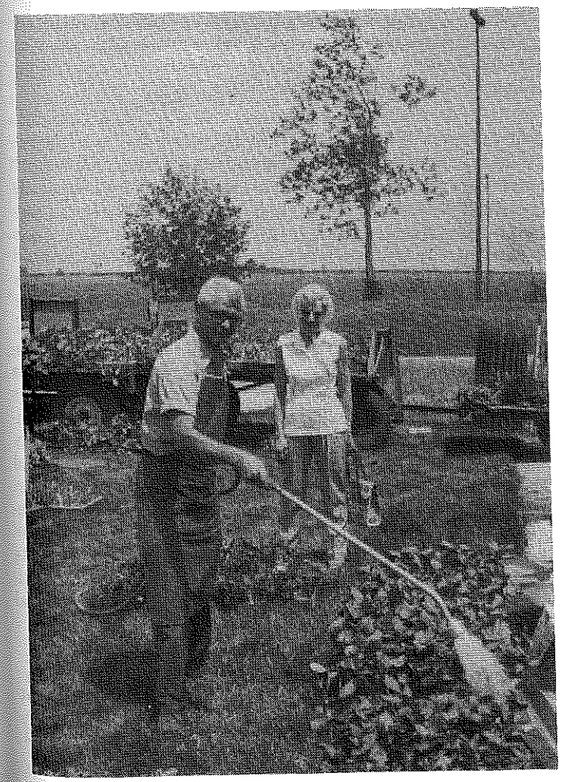
SUPPLY AND DEMAND

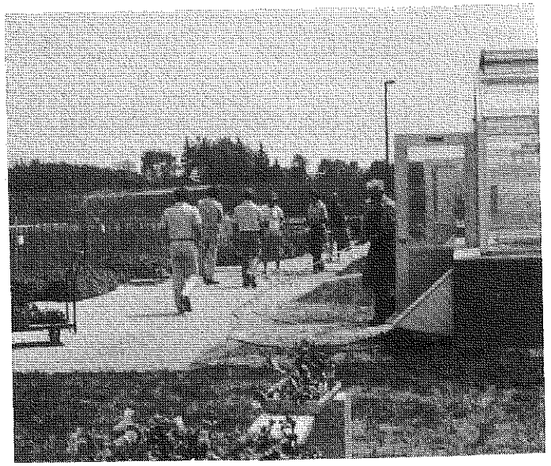
The decline in farm produced people leaves a large demand in the urban job market and a small supply of qualified people to fill it. Businesses with affirmative action plans find it especially difficult to find qualified minority individuals. The result is that many entry level positions are filled by whoever can be found. The biggest lack of skilled agricultural employees seems to be at the blue collar and middle management level. It's at precisely this level that postsecondary education in Wisconsin is directed.

Industries, unions and manpower development people see no substitute for prior work experience in qualifying people for a job. Our vocational philosophy of "Learning by Doing" would seem a good alternative when a farm background isn't possible. Our advisory committees have given their approval to this type of training and it's been accepted by most of our employers. Milwaukee Area Technical College's 180-acre farm becomes the student's primary classroom and learning laboratory. "Learning by Doing" involves practice and repetition. This not only sharpens job skills but also helps approximate the work environment. If a student becomes bored after one repetition of a task, they will not likely find it any more gratifying when performing in industry.

PROBLEM SOLVING

In the Agri-business Division at Milwaukee Area Technical College, we rely heavily on problem solving as a teaching technique. Students can't possibly acquire the equivalent of four years of high school vo-ag and eighteen years of growing up on a farm in a two-year vocational diploma program.

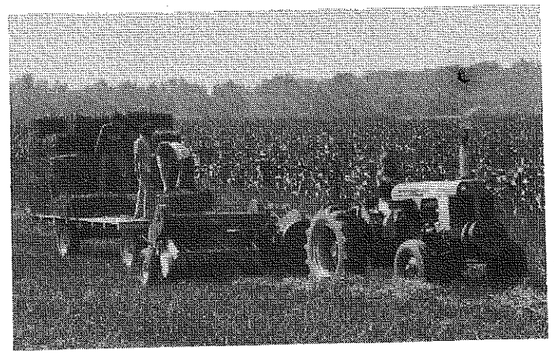




The best one can expect is that students develop to the point of being able to find information and reason their way out of problem situations. Employers don't need people who stand around drinking coffee because they aren't sure of what to do next.

Teaching adults with an urban background presents some unique challenges. Many times students aren't able to relate what's being taught to past experiences. They may not be able to identify with examples the teacher uses. It may be difficult to explain why a farmer is willing to work fourteen hours per day when his return to labor is less than could be made in industry. These students may need to re-define their self-concept and identify if they are to succeed in agri-busniess. Helping them do this becomes a larger challenge than improving their subject matter knowledge.

Agri-business is ever broadening and diversifying. Postsecondary adult education in agriculture must keep pace in order to serve a greater diversity of students as well as employers. This is especially true in vocational or adult education districts where high schools do not offer vocational agriculture.



Preparation for "Teaching Vocational Students with Special Needs"

By
Lawrence F. Helt
Teacher Educator
North Dakota State University

Lawrence F. Helt

In conformity with recent federal legislation and state sanctioned guidelines, the future vocational teachers must be prepared to assume the responsibility for accommodating mainstreamed students in their classes. Agricultural educators should provide the best possible pre-service preparation for prospective teachers aimed at meeting the state and federal guidelines relevant to serving the disadvantaged and handicapped vocational students.

During the 1977-1978 school year, just such a challenge was met by developing the new course entitled: "Teaching Vocational Students With Special Needs" within the Agricultural Education Department at North Dakota State University. As a special course designed to complement the methods series, the undergraduate students initially enrolled in the elective agricultural education course through counseling by staff advisors. From there on, the course has evolved through efforts of the author in providing relevant teaching practices and appropriate student experiences in the "lifestreaming" educational course that has attracted five graduate students (active vo-ag teachers) during the current academic spring quarter. The course class size has grown from 24 students in 1978 to a total of 28 in 1979 even though it was offered both years during a competitive late Monday evening hour on a one session per week basis. It is anticipated that most agricultural education undergraduates will schedule the course in their program in the future because it will be offered both fall and spring quarters of the 1979-80 academic year.

OBJECTIVES

The underlying course objectives are centered around the premise that teaching special need students is challenging and equally as rewarding as teaching "normal" students. The greatest residual effect realized is that the prospective teachers gain practical experiences that will help them become more empathetic toward all students. Simply stated each future teacher becomes more proficient in serving all students; including the gifted, the normal, and the disadvantaged, as well as the handicapped.

Specifically, the key objectives are geared to help prepare the prospective vocational teacher to serve as a functional and cooperative team member of the faculty staffing required to develop Individualized Educational Programs (IEP) for all mainstreamed handicapped students. The future vocational agriculture teachers learn to recognize special need students placed within the regular classroom or the least restrictive educational environment. Special emphasis is placed on implementation of needs assessment and vocational evaluation follow-up. With the utilization of a localized Directory of Human Service, each future, as well as current, teacher learns to rely upon his or her own school and community resources. Teaching strategies are promoted that will modify the course content to best fit each special need student's individualized learning styles.

When all objectives are focused vividly, the ultimate goal of student occupational placement reveals itself as the ulterior motive to nurture independence in life for each handicapped student.

TOPICS

Each class session is devoted to a course topic that tends to build toward achievement of the specific course goals. The role of the vocational educator in serving special need students evolves as the first class topic for the course. The second topic revolves around implementing the legislative provisions for students with special needs in vocational programs. The next three topics deal with the identification of the disadvantaged, or mentally or physically handicapped students and how teachers can recognize their strengths as well as their limitations. The following three topics relate a natural sequence of student referral, vocational evaluation and class placement through a faculty staffing that formulates an IEP for each handicapped student. The final three topics zero in on utilization of school, community and state human services (resources); followed by evaluating, altering and modifying education materials for mainstreamed students and finally implementing teaching strategies that capitalize on all the strengths of the individual special needs student.

ASSIGNMENTS

All students must attend class sessions and submit weekly reading reports on the appropriate discussion topic. Participants conduct a survey of vocational agriculture teachers each year to determine current service status to special need students in typical high schools. Visits to a local vocational evaluation center, regular vocational placement program, and a sheltered workshop for work adjustment skills development are required of all prospective teachers.

A "hands on" type experience is provided, whereby each future teacher prepares a comprehensive case study on three (real or hypothetical) students. Specifically, a case study is completed on one student for each of these three cateogries: disadvantaged, mentally handicapped and physically handicapped. Initially the case study involves a complete Individual Student Learning Needs Profile. A Vocational Evaluation and Needs Assessment would be recommended as the next step which would be completed by special services personnel. Each prospective teacher does experience the rôle of a "Case Manager" by making the necessary arrangements for the faculty staffing before the actual IEP and Individual Instructional Plan (IIP) are developed by the student-parent-faculty team conference. The future teachers experience designing the long term goals for the IEP and also the short term objectives for the IIP for each student case study. Each prospective teacher enumerates a comprehensive set of teaching strategies for each special needs vocational student with the most effective individual learning styles and personal student strengths emphasized.

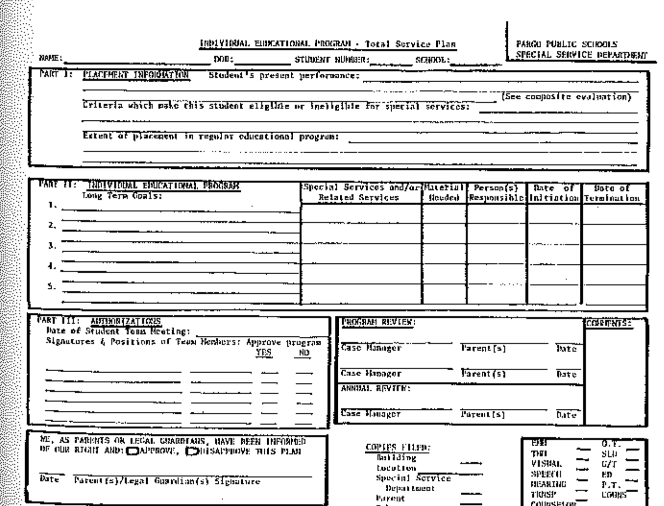
EVALUATION

The student and course evaluations have been very effective means of providing feedback and improvement to instruction. As an example, the Ghetto Game was used as a human relations module in the first class offering. Based on the student participant feedback, the author felt justified in deleting the activity from the subsequent course offering. The student evaluation technique revolves around two comprehensive written exminations. Both the midterm and the final exam are used primarily as teaching devices rather than grading instruments. The two evaluative instruments yield only 1/10 of the course grade value, but yet the course highlights are emphasized and the activity provides an opportunity to share the key points through individualized study and response. Another evaluative instrument is used to determine how effectively the course was taught through utilization of references, relevant "hands on" activities, practical case study assignments, and suggested course/class improvements.

SUMMARY

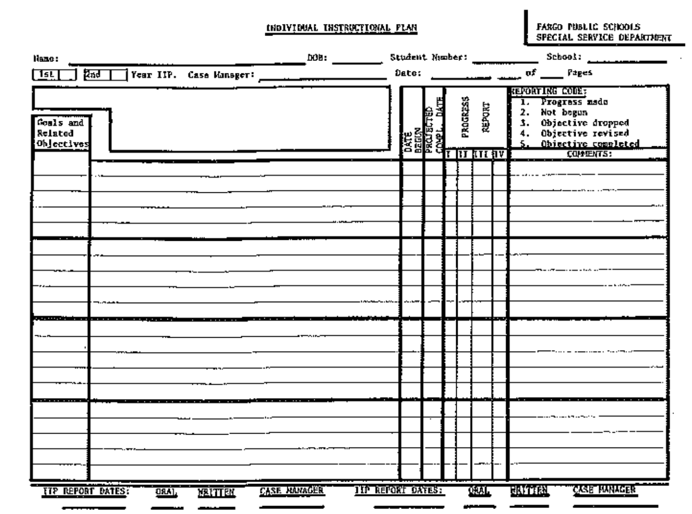
One aim of the course cited is to provide time and teaching stations where each prospective teacher will experience serving as a resource person to special needs students in a vocational agriculture program. The typically mainstreamed vocational agriculture classes at the supervised teaching centers in the State of North Dakota provide a nearly perfect setting and experience to the student teachers. Invariably, secondary students with special needs are already served by the supervising vocational agriculture teachers. As more comprehensive special services become evident in the smaller rural schools, the future vocational agriculture teachers should be and must be prepared to serve all students that can benefit from the program. The team approach is not new to vocational agriculture teachers whereby the student, parents and teachers all work for the occupational goals of the student. However, the present and future thrust must be to strengthen these established ties and expand beyond the horizons of the home and vocational agriculture department to include the entire school system as well as all available resources of the community.

IEP



INDIVIDUAL EDUCATIONAL PROGRAM - Total Service Plan
FARGO PUBLIC SCHOOLS
SPECIAL SERVICE DEPARTMENT
NAME: DOB: STUDENT NUMBER: SCHOOL:
PART I: PLACEMENT INFORMATION Student's present performance:
(See composite evaluation)
Criteria which make this student eligible or ineligible for special services:
Extent of placement in regular educational program:
PART II: INDIVIDUAL EDUCATIONAL PROGRAM
Long Term Goals:
1.
2.
3.
4.
5.
Special Services and/or Related Services | Material Needed | Person(s) Responsible | Date of Initiation | Date of Termination
PART III: AUTHORIZATIONS
Date of Student Team Meeting:
Signatures & Positions of Team Members: Approve program YES NO
PROGRAM REVIEW:
Case Manager Parent(s) Date
Case Manager Parent(s) Date
ANNUAL REVIEW:
Case Manager Parent(s) Date
COMMENTS:
WE, AS PARENTS OR LEGAL GUARDIANS, HAVE BEEN INFORMED OF OUR RIGHT AND: APPROVE, DISAPPROVE THIS PLAN
Date Parent(s)/Legal Guardian(s) Signature
COPIES FILED:
Building
Location
Special Service Department
Parent
Other:
EBD O.T.
TMI SLD
VISUAL G/T
SPEECH ED
HEARING P.T.
TRNSP COMNS
COUNSELING

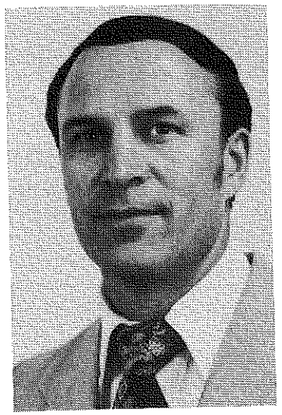
IIP



INDIVIDUAL INSTRUCTIONAL PLAN
FARGO PUBLIC SCHOOLS
SPECIAL SERVICE DEPARTMENT
Name: DOB: Student Number: School:
1st 2nd Year IIP. Case Manager: Date: of Pages
Goals and Related Objectives
DATE BEGUN | PROJECTED COMPL. DATE | PROGRESS REPORT I II III IV
REPORTING CODE:
1. Progress made
2. Not begun
3. Objective dropped
4. Objective revised
5. Objective completed
COMMENTS:
IIP REPORT DATES: ORAL WRITTEN CASE MANAGER IIP REPORT DATES: ORAL WRITTEN CASE MANAGER
IF YOU AS A PARENT HAVE ANY QUESTIONS ABOUT ANY ASPECT OF THIS PLAN OR REPORT PLEASE CONTACT THE CASE MANAGER.

Opportunities for Involvement in International Agricultural Education

By
Harold R. Matteson
Director, Center for International Programs
New Mexico State University
Las Cruces, NM



Harold R. Matteson

The first question we must ask in considering the topic under discussion is: what opportunities are there for those in our field to play a part in international agricultural education? Developing countries do not generally look upon agricultural education as a specific discipline. Rather, they see it as an umbrella term to cover animal science, agronomy and virtually any other subject of farm-related coursework. Either through oversight or ignorance, our own government takes much the same attitude. For purposes of this article, I will accept the broader definition for international agricultural education and use "agriculture education" to identify the specific area of study.

BACKGROUND

A 1974 mandate from Congress to the U.S. Agency for International Development (AID) has had a considerable impact on the programs the latter can conduct in less developed countries (LDC's). In essence, it states that programs developed, implemented and financed by or through AID must focus on the so-called "poorest of the poor." Since most LDC's are agricultural, this usually means targeting programs for impoverished small farmers.

Prior to 1974, much of AID's development assistance was geared to a different clientele. Thus, the new mandate has led to a number of programmatic changes and can be expected to lead to more as time goes on. Some of the ones already made, as well as others that should be made, are bound to increase the international opportunities for all those in vocational education and especially for those in agricultural education.

More Emphasis on Agricultural Education in Elementary and Secondary Schools

Many people in change agent positions in developing countries are university graduates, and often they took their degrees in the United States. In addition, few of them come from farm backgrounds or have had training in agriculture prior to college. It should come as no surprise that they lack the motivation and the ability to put together programs relevant to small farmers.

One way to ease this problem, at least in part, is for U. S. technical assistance programs to concentrate more on training at the secondary level and less on universities. This is likely to trigger several changes in existing secondary agricultural programs in countries involved. Schools will have to alter admissions policies to admit more rural students, and more schools will have to offer agricultural courses. There is a need to find ways to allow students to study in their own communities and to devise curricula that emphasize "hands-on" experience, preferably on the students' own farms. Schools should also set up internship programs that give participants a chance to learn what it feels like to be a change agent.

More Emphasis on Lay Leaders as Change Agents

A major problem LDC's come up against as they confront the plight of the small farmer is the scarcity of change agents. The ratio between the latter and the former in some cases ranges between 200 and 5000 to one. The problem is compounded by the fact that the target population is largely illiterate and the most effective means of communication is word of mouth. This makes it clear that, if professional change agents expect to reach very many small farmers, they must be able to train and work through lay leaders.

More Emphasis on the Role of Women in Agricultural Development

AID and many LDC's are beginning to recognize the role women play in agricultural development. Traditionally, they have been seen as homemakers with considerable influence on family nutrition and diet. However, recent studies indicate they are often deeply involved in food production since their husbands spend most of their time at jobs off the farm. The growing awareness that women and children do a great deal of crop and livestock tending should have a considerable impact on the formal and non-formal offerings of rural schools.

Becoming Involved in International Activities

The foregoing makes it quite apparent that, if AID and other development agencies really want to meet the needs of small farmers, vocational educators — particularly those in agriculture — have a major role to play. Indeed, those already in the field are often asked by students and others what it takes to become involved in programs growing out of the 1974 mandate. It is usually best to preface answers by noting that in the past the universities and government agencies conducting AID programs have staffs that run heavily to specialists with doctoral degrees. While this tendency has not changed completely, there is now room in a growing number of projects for experienced instructors of vocational agriculture or for county agents with some international background.

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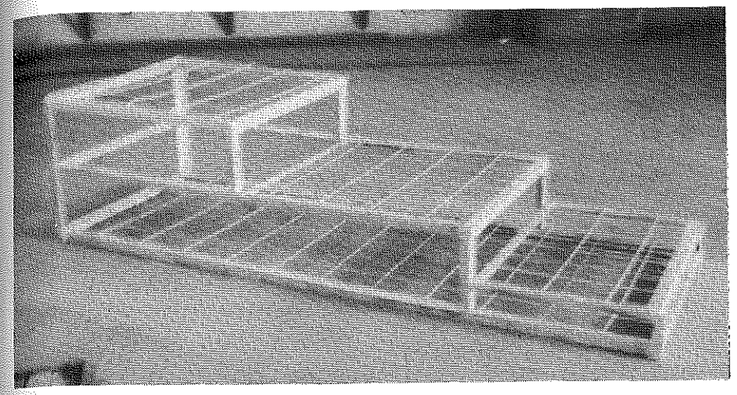
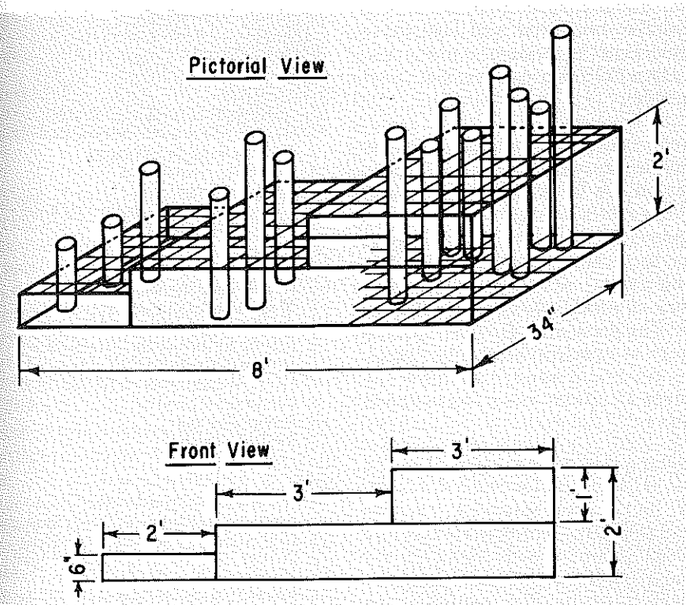




★ ★ ★ THIS WORKED FOR ME! ★ ★ ★

By
Dean Swafford and Dan Swafford
Vocational Agriculture Instructors
Savannah High School
Savannah, MO

VERTICAL STORAGE FOR SHORT METAL

During our years of teaching we have always had trouble storing short lengths of metal in the ag-mechanics lab. This past summer we constructed a metal storage rack which solves this problem. This rack will neatly store metal from 6 inches to 4 feet in length. One feature of this rack is that you can easily locate metal of any size or length. The rack is made of one 16 foot hog stockade panel and 67 feet of 1½ x 3/16 inch angle. With the metal being stored vertically, instead of horizontally this allows the student to easily see the kind, size and length of the material. Metal can be stored in the open spaces of the hog panel according to the length and size. We have found this storage rack very helpful.

CONTINUED

GUEST EDITORIAL - IT WILL WORK!!

3. Benefits to the ag department and teachers have been numerous. First on the list, however, would have to be the first-hand knowledge of the problems faced today by farmers and farm managers. This knowledge has re-supported our secondary ag program, but has also caused us to re-evaluate and add some new instructional materials. It has kept us abreast of the latest developments in production and harvesting of food and fiber at the grass roots level.

Through the adult program we have a ready supply of Ag Advisory Committee candidates. I believe our committee is more versatile and we have a closer contact with each member. Because of widespread advertising of our adult program, school administrators and board members have become more aware of our total ag program. Some adults have donated machinery to be assembled and overhauled in our shop. They have provided places of employment and training for students in our work experience program.

Although the adult program cannot take all the credit, we have seen a steady increase, in the past four years, in our secondary ag program. This increase has been in terms of numbers of students as well as increased participation in FFA leadership activities.

Is the adult ag education program worth the extra work and planning necessary to initiate and carry it out? After three years our ag department thinks so. I look forward to the program each fall and feel that I learn as much as the students do. However, you'll have to make your own decision. It has been proved! It will work!!

ARKANSAS AGRICULTURAL MECHANICS*

By
Clifton R. Braker
Teacher Educator
University of Arkansas
Fayetteville, AR

Teaching skills in vocational agricultural mechanics has been the topic for debate for many years. However, it is the opinion of all that teaching basic skills is a must for all mechanics programs. The question arises, "Just how much time should be spent on basic skills?"

Arkansas' vocational agricultural mechanics program is very unique. Its design makes it flexible enough for teachers to teach basic skills and also allows for advanced training. The mechanics program is built on fourteen areas. These areas are: arc welding, oxyacetylene welding and cutting, electricity, drawing and sketching, plumbing, sheet metal and soldering, woodwork - power tools, woodwork - hand tools, tool fitting, concrete and masonry, cold metal work, small gas engines, surveying, and painting and glazing.

The basic design of the program allows the instructor to teach basic skills during the first two years of a vocational agriculture program. It is recommended that the station method be employed in presenting the basic skills.

The station method of teaching in the laboratory requires the instructor to teach the "must know" items in the classroom over four or five areas. The number of areas are determined by the number of stations to be used in the laboratory. The instructor must produce some type of "skill" sheet, "procedure" sheet or "job" sheet for each station. The student will have the basic skills at each station demonstrated before being required to complete the skills. Normally, two to four students will be placed at each station. As students complete the skills at each station, they will rotate to the next station.

Minimum level of performance becomes very important. What is acceptable must be spelled out very clearly to each student. The instructor must evaluate the skill performance at each station and approve each student before moving to the next area. The instructor must set a level of skill performance that is achievable, yet high enough that quality will not be sacrificed. Quality control becomes more important than just completing the skill. If the skill completed does not meet the minimum level of acceptance, the student must again attempt the skill. Instruction and demonstration should be reviewed and assistance provided to the student to aid in producing a skill of a quality that is acceptable.

Job sheets (or whatever name used) must contain the skill to be completed, a list of tools, equipment, and materials needed, and a step-by-step procedure (with illustrations) of how to complete each skill. The development of these sheets requires an instructor with special talents. The procedure must be specific enough to provide the student direction, yet broad enough to allow the student to make some decision on his own.

After a student has completed the basic skills in the fourteen areas, he may move into semester courses where all the basic knowledge and skills will be applied. Many of the areas are stepping blocks into more advanced areas. For example the small gas engine area provides the basic fundamentals of engine operation and allows the student to move to larger, more complex engines. It is also useful in the area of servicing and maintaining engines.

Listed are examples of skills that may be performed in each of the areas of emphasis.

Area: Drawing and Sketching
Skills:
1. *Drawing lines*
2. *Making letters*
3. *Drawing symbols of materials*
4. *Drawing to scale*
5. *Drawing obliques*
6. *Drawing isometrics*
7. *Drawing orthographics*
8. *Sketch a freehand drawing*

Area: Sheet metal and Soldering
Skills:
1. *Clean, shape, and tin a soldering copper*
2. *Marking and cutting to size*
3. *Making and soldering a lap joint*
4. *Patching and soldering small holes*
5. *Making and soldering hook joints*
6. *Soldering a wire splice*
7. *Use self tapping screws and pop revets*
8. *Layout and marking projects*

Area: Plumbing
Skills:
1. *Identification of fittings*
2. *Measuring, marking, and cutting pipe*
3. *Threading pipe*
4. *Cutting and reaming copper tubing*
5. *Flare copper tubing*
6. *Sweating copper fittings*
7. *Assembling plastic (flex and PVC) pipe*

Area: Cold Metal
Skills:
1. *Cutting metal with cold chisel*
2. *Cutting metal with hacksaw*
3. *Drilling holes in flat metal*
4. *Threading round stock*
5. *Tapping threads*
6. *Cutting metal with power hacksaw*
7. *Shaping metal cold*

Area: Surveying
Skills:
1. *Determining distances*
2. *Measuring land areas*
3. *Reading legal description*
4. *Setting up surveying instruments*
5. *Differential leveling*
6. *Check and adjust instruments*
7. *Topographic leveling*
8. *Profile leveling*
9. *Percent of slope*

Area: Finishing
Skills:
1. *Selecting paint and brushes*
2. *Applying finishes to different materials*
3. *Removing old finish and refinishing*
4. *Cutting and installing a piece of glass*
5. *Spray painting*
6. *Selecting proper equipment*

Area: Electricity and Wiring
Skills:
1. *Reading a meter*
2. *Identifying wires, cords, and cables*
3. *Identifying electrical devices*
4. *Connecting wire to terminals*
5. *Installing electrical devices in a circuit*
6. *Planning the wiring system*
7. *Reading a schematic and wiring diagram*

Area: Tool Fitting
Skills:
1. *Selecting and adjusting a grinder*
2. *Refacing a grinder wheel*
3. *Replacing a grinder wheel*
4. *Fitting tools*
   a. *Center punch*
   b. *Plane iron (wood chisel)*
   c. *Standard screwdriver*
   d. *Cold chisel*
   e. *Twist drill*
   f. *Wood auger bit*

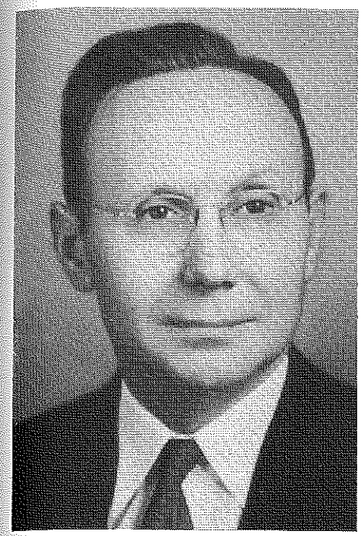
(Concluded on Page 117)

*Submitted for publication with the approval of the Director of the Arkansas Agricultural Experiment Station.

Leader In Agricultural Education

ALBERT J. PAULUS

*By George W. Wiegers, Jr.**



Albert J. Paulus

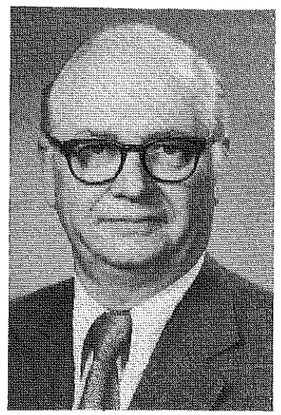
Few, if any, who have worked in agricultural education have more fully enjoyed helping youth and adults progress in their learning than has Dr. Paulus. He has demonstrated though the years the rare ability "to boil down" information so that students and teachers could grasp and use it in solving real problems.

Dr. Paulus served as Subject Matter Specialist for over a quarter of a century at the University of Tennessee, Knoxville. He added poetic touches to his "mimeos" and other publications for teachers of vocational agriculture. He prepared more than forty such publications; edited a textbook, *"Hog Profits for Farmers"*; wrote numerous articles for periodicals; and for several years served as special editor of the *Agricultural Education Magazine.* He also taught undergraduate and graduate courses in Agricultural Education. In 1954-55, he served as acting department head.

Born in Suffield, Ohio, on December 8, 1893, Dr. Paulus grew up as the middle child of seven brothers and sisters on "Maple Lane Farm," Johnny Cake Hollow, in Portage County. In his youth he worked on a dairy farm and in his spare time worked as a house painter, mule driver on road construction, and a truck driver for a bakery. His education was interrupted by service in World War I, but he earned a Bachelor's degree from Ohio State University in 1924. Once he stated that without exception his college studies were a real joy.

Dr. Paulus had this to say about his first experience as a certified voag teacher, "It was a new department in a relatively small high school in northern Ohio (Congress High School). The warm welcome, wholesome cooperation, and complete support of the program were most heartening. Each year in addition to the high school classes, we had a Farmers' Institute with state recognized speakers, a community fair with exhibits, an adult class, and a play with a local adult cast. Later we added a young farmers' class. Satisfaction and rewards were beyond all expectations."

During his years in the Congress Community he married Miss Ella Everett from Sandusky, Ohio. She also was a graduate from Ohio State University having a degree in Home Economics. She was employed as a dietitian at Cleveland Lakeside Hospital until the time of their marriage.



George W. Wiegers

Later, both Dr. and Mrs. Paulus pursued graduate study at Columbia University and completed their Master's degrees at Cornell University in 1928. Dr. Paulus continued study at Cornell and earned his Doctor of Philosophy degree in Agricultural Education with minors in Rural Secondary Education, Agricultural Economics, and Farm Management.

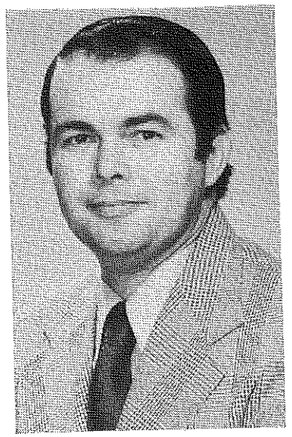
When Dr. Paulus looked over the field in 1930 he decided the greenest pasture was at Clemson University and joined the faculty there. During the next four years he concentrated on student teaching, adult education, in-service training, and the preparation of sixteen publications of teaching materials on farm enterprises. In addition he taught educational psychology. In one of his writings relating to vo-ag teachers in South Carolina, Dr. Paulus has stated: "A more dedicated and determined-to-serve group of men I have never met. There they were in the depth of the depression with cotton the major cash crop selling at five cents per pound (about one-fourth normal price). Their salary checks were low, nearly always late, and mostly in script, which meant a sizeable discount when cashed. When working with these men in small groups, one could hear many a clever joke on their economic predicament, but seldom a gripe. They had a true faith in themselves and the future of their work." The national economic depression had a severe impact on salaries at Clemson so Dr. Paulus had to look elsewhere to meet his family needs and other obligations.

(Concluded on Page 118)

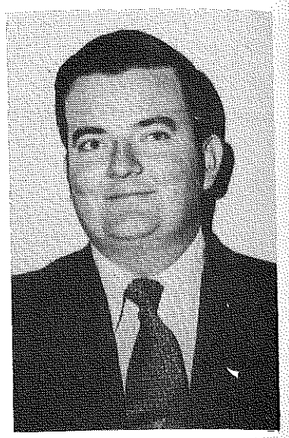
**Professor, Vocational Technical Education Department*
The University of Tennessee, Knoxville

Flexible Record-Keeping Systems

By
Herschel Staats
Teacher Educator
University of Maryland, Eastern Shore
Princess Anne, MD
and
Richard McCabe
Vocational Agriculture Instructor
Wicomico Senior High School
Salisbury, MD



Herschel Staats



Richard McCabe

Are record books becoming obsolete? In states where there is great diversity in the career objectives of the vocational agriculture students, a record book can be too restrictive in its capabilities. To meet the varied needs of students, the State of Maryland is developing a loose-leaf record system where the students can build their own record book.

FLEXIBILITY NEEDED

Flexibility is needed in a system so the students need not be concerned with many pages that do not apply to them. Students working in agri-business for an hourly wage need to record such things as time worked, wages earned, and new skills performed — often call supplementary and improvement practices. The skills learned by the students will also vary widely with their career objectives. Students in a production agriculture program will need to keep records that will enable them to make management decisions at the end of the year. A student with a production enterprise will need to record receipts, expenses, depreciation inventories, and production practices.

In making management decisions at the end of the year, all enterprises can be classified as either production, service, or holding enterprises. A production enterprise would be something like a crop or livestock. An example of a service enterprise would be a farm shop. Borrowing money or storing grain for future use or sale would be an example of a holding enterprise.

Some capabilities of a record system are needed by all students, such as FFA and community leadership activities, calendar of events, agreements, and a financial net worth statement by year. This part of the record system can promote cooperation and unity between the members of the chapter and between different chapters on a regional and state basis.

LOOSE LEAF SYSTEM

For these reasons the flexibility needed in a record-keeping system can best be obtained in a loose-leaf system where pages can be added or substituted to meet the students' needs, which would include the scope and size of enterprises and work experiences.

Planning is one prerequisite for success in any endeavor. Before beginning any enterprise, sound planning and agreements between all involved parties should be discussed and recorded. There should be different agreements for supervised work experience, agri-business, and production agriculture in livestock and/or crops. In a loose-leaf notebook one or more of these agreements can be added. Standard forms should be provided for guidelines in developing an agreement in each area.

The heart of any record system is the recording of the receipts and expenses in such a fashion where they can be analyzed to make future management decisions. A student working in a supervised work experience program may only need to keep a daily record of work experience, hours of labor, and wages, while a student owning and operating a livestock or crop enterprise needs to be able to record production practices as well as receipts and expenses.

THE RECORDS

Figure I and Figure II are examples of our double-entry expense pages. The receipt pages are set up in the same format to make the opposite transactions. This system will allow the students the flexibility of keeping records on as many enterprises as they wish. In production enterprises the student needs another section of the record-keeping system to record production and cultural practices, such as planting dates, breeding records, milk production, etc.

Students working in agri-business for an hourly wage could elect not to keep this section at all but could keep their time worked, skills covered, and wages earned on a daily diary page.

Opening and closing inventories and net worth statements can be used by all students even though they are keeping records in different sections of the system. The last line on the net worth statement should tell the students the yearly and long-range rise and fall in net worth.

FIGURE I
EXPENSES FOR CALENDAR YEAR

These instructions for recording expenses apply to all pages entitled "Expenses for Calendar Year_____."

1. Record the name and scope of each enterprise in one of the blanks at the top of columns (D) through (K). The same order of listing enterprises on the receipt pages should also be followed on the expense pages.

2. Record entries as follows: Column (1) - The date the expense was incurred. Column (2) - Describe the expense item. Column (3) - Person or enterprise to whom the expense was paid. Column (4) - Tons, bu., Head, lbs., etc. Column (5) - Number of units purchased or transferred. Column (6) - The price paid per unit. Column (7) - The total cash paid on day of purchase or total value of transferred product. Column (8) - The amount of money owed by you to the person listed in Column (3).

EXPENSES

(1)	(2)	(3)	(4)	(5)	(6)	(7)	(8)
Date	Kind of Expense Item	Paid To:	Unit	Quantity	Price/ Unit	Total Cash	Total Charge
1.						$	$
2.							

FIGURE II
EXPENSES (Cont.)

Column (A) - The amount of money paid toward the total charge listed in Column (8). Column (B) - The amount of money paid for services or goods not related to your enterprise(s). Column (C) - The total value of a capital expense listed in Column (2) must be listed in this column. Column (D) through Column (K) - The total value of the item in Column (2) must also be recorded under the appropriate enterprise.

The item of Column (8) minus the total payments on the item in Column (A) must be recorded on the summary page as "Accounts Payable."

The total of Column (7) plus the total of Column (8) must equal the sum of the totals of Columns (A) through (K).

ENTERPRISE

(A)	(B)	(C)	(D)	(E)	(F)	(G)	(H)	(I)	(J)	(K)
Paid on Account	Non-Business Expenses	Capital Expenses								
$	$	$	$	$	$	$	$	$	$	$
1.										
2.										

To aid the student in keeping a flexible record system with the minimum amount of confusion, two things should be accomplished. First, the record system should be kept as simple as possible and the different sections should be color-coded for easy identification.

The second thing that should be accomplished before the students start keeping their own record of activities is for the teacher to run through a sample problem with the students that gives examples of the many different kinds of entries possible in the record system. If the students cover an example problem from the beginning inventory to enterprise analysis, they will not only learn how to keep records, but also many of the management skills in planning and setting up an enterprise.

CONTINUED

Area: Concrete and Masonry
Skills:

1. *Estimating concrete*
2. *Mixing concrete*
3. *Placing, finishing and curing concrete*
4. *Mixing and spreading mortar*
5. *Block and brick layout*
6. *Stonework*

Area: Woodwork-Hand Tool
Skills:

1. *Tool identification*
2. *Reading a rule*
3. *Tool uses*
4. *Building materials selection*
5. *Estimating building material*
6. *Bills of materials*
7. *Fasteners*
8. *Glues and gluing*

Area: Arc Welding
Skills:

1. *Strike arc and run beads*
2. *Selecting electrodes*
3. *Position welding*
4. *Weld joints*
5. *Arc Cutting*
6. *Hard facing*
7. *MIG and TIG welding*

Area: Oxyacetylene Welding and Cutting
Skills:

1. *Setting up and handling equipment*
2. *Turn on, light, adjust, and turn off*
3. *Cutting*
4. *Fusion welding (mild steel)*
5. *Position welding*
6. *Brazing*
7. *Aluminum welding*
8. *Cast iron welding*
9. *Hard facing*

Area: Small Gasoline Engines
Skills:

1. *Inspection and identification of engines*
2. *Disassembling of engines*
3. *Determine wear*
4. *Recondition engine*
5. *Assembly of engine*
6. *Troubleshooting*
7. *Components of an engine*
8. *Tune up*

Area: Woodworking — Power Tools
Skills:

1. *Tool identification*
2. *Square a board*
3. *Rip a board*
4. *Make a rabbit*
5. *Make a taper*
6. *Make dado joints*
7. *Cut a bevel*
8. *Cut a circle*
9. *Saw parallel curves*
10. *Cut a hole*
11. *Plane a board*
12. *Safe operation*

a. *Table saw*
b. *Band saw*
c. *Jointer*
d. *Planer*
e. *Radial arm saw*

In summary, basic skills in agricultural mechanics should include more than the use of the arc welder and oxyacetylene torch. These basic skills should be broad enough to provide the application in several areas that will be common to the rural and urban vocational agriculture student. The skills in the fourteen areas are of such nature that all can be accomplished during the four-year vocational agriculture program.

CONTINUED

LEADER

Dr. Paulus then accepted the position as professor and head of the department of education and director of student teaching in a Pennsylvania College. This new challenge took him somewhat astray of his first love — agricultural education. While serving St. Thomas College (later the University of Scranton), he applied to general education the principles and practices he had learned in agricultural education.

As Mrs. Paulus once indicated, he couldn't give up agriculture. At Christmas time in 1937 he came to U-T at Knoxville to promote the selection, organization, publication, and use of teaching materials for vocational agriculture teachers. His nearly twenty-seven years of service made his name well known to agricultural educators in the South through his numerous publications, his service to the many professional organizations, of which he was a member, and his poetic hobby that brought color to his work.

Dr. Paulus had this to say as he approached retirement in Tennessee: "The many and pleasant contacts with teachers of vocational agriculture have provided a continuation and expansion of my faith in that group laid in Ohio, sharpened in New York, broadened in South Carolina, missed in Pennsylvania, and ripened in Tennessee. My reward for working with this group leaves me little choice but to admit that I hold these well-tempered sons of the soil and of human dignity as a special group, whose friendship I value most highly, and with whom I feel a bond which only compulsory retirement could break."

Dr. Paulus was involved in a variety of worthwhile activities beyond teaching and developing subject matter publications. A year or so after the passage of the Smith-Hughs Act and before the FFA became a reality he served as an advisor of a rural Boy Scout Troop in Ohio. This interest was kept alive. In the 1940's he served as Scout Master of Boy Scout Troop 19 in Knoxville, and continued with the Explorer Post in the 1950's. He received a citation for his scout leadership in 1955 and the Medal St. George in 1957. For many years Tennessee, Georgia and Alabama FFA leaders met annually at Chattanooga, Tennessee to select and honor FFA queens. Dr. Paulus helped judge the Tri-State Queen Contest for twenty-seven years. Through the years he assisted with many types of FFA activities. He has been awarded the Tennessee State Farmer Degree, Forestry Citation and The American Farmer Degree. For many years Dr. Paulus' main hobby was to collect, quote and write poems. As his interest in writing poetry grew, so did the demands for poems to be written for specific occasions and for the recitation of numerous poems from his collection. In 1964 Professor Paulus' many friends made it possible to publish a booklet containing selected poems that he had written through the years. Before retirement he had given approximately 350 talks and had written nearly the same number of poems.

Religion has been a vital part of Dr. Paulus' life. In 1959 he was nominated to the U-T Board of Trustees of the School of Religion and served continuous to retirement date and beyond. While at U-T he had been faculty adviser for U-T Newman Foundation Board, and co-chairman and member of the Knoxville Round Table of Christians and Jews. In 1971, Dr. Paulus was awarded the highest honor that the Catholic Church bestows on laymen, being designated a Knight of St. Gregory by Pope Paul VI.

Dr. Paulus officially retired from U-T in August, 1964 after reaching the manditory retirement age of seventy, but the change brought very little slowdown in his activities and contributions. He then used his energies and talents to coordinate the religious education program in two local parishes. He has served as a substitute teacher. He has given eighty-two speeches and written two hundred and twenty-three poems in retirement. For the past two or three years he has been making miniature (scale: 1"-1') pieces of farm equipment that was used on the farm when he was a boy.

Dr. Paulus has always been a family man. He managed to work and play with his family as a part of his way of life. The Pauluses have three children, Sister Mary Albertine of the Sisters of Mercy, James, and Thomas. Both boys are professional engineers. Eight grandchildren, now ranging in age from 13 to 19, add joy to their lives. The Pauluses reside at 3407 Southwood Drive, Knoxville, TN 37920.

CONTINUED

OPPORTUNITIES FOR INVOLVMENT IN INTERNATIONAL AG. ED.

Students studying for degrees in agriculture education and who are interested in working overseas should consider beginning their careers by applying to such agencies as the Peace Corps. The experience gained in this manner will help them compete later on for international posts offered by AID and other public and private institutions. Those already serving as secondary or post-secondary agricultural instructors or teacher educators may begin by visiting the nearest university international programs office to find out what opportunities are likely to be available.

Clearly, the United States is going to be focusing its bilateral assistance programs on the poor farmers of the world. This cannot be done without a sizeable commitment of teaching personnel to agricultural education at the secondary, post-secondary and university levels. Opportunities for those wishing to work in international education programs are certain to arise. The real question that remains to be answered is how well prepared are we to meet the challenge.

GRANDFATHER'S COLLECTION

I don't think I've told you yet about the time the residents of our small community asked Grandfather to teach the Sunday School class. The very first Sunday Grandfather caught a youngster stealing a nickel out of the collection. Grandpa tried to impress upon the kids how lucky they were to have a Sunday School and that their small donations were necessary so that other children might also have Sunday School. "Just think children, in Africa there are six million square miles where little boys and girls have no Sunday School. Now what should we all strive to save money for?" Grandpa asked.

"To go to Africa", replied fifteen cherubic children.

* * * *

The next Sunday Grandfather decided to take the kids on a nature walk in an effort to give them a greater appreciation of the outdoors. As they were all walking down a trail a deer bounded across the path up ahead. Grandpa asked one of the little boys, "What kind of animal was that?" The little boy replied that he did not know. "Well", said Grandpa, "What does your mother call your father?" The little boy's eyes got as big as watermelons and he said, "Don't tell me that was a baboon!"

* * * *

It seems there's always one wiseacre in the crowd and Grandfather had his. One little angel got fed up with Grandpa's efforts to educate them and told him so in an unkind manner. "Why, you bad boy", Grandpa was more than a little shocked, "I never heard such language since the day I was born." To this the little angel replied, "Yeah Gramps, I s'pose dere wuz a good deal of cussin de day you wuz born."

* * * *

From the Cowboy Dictionary — "Old Timer" — One who remembers when girls who had nothing to wear stayed home.

* * * *

Who was it that said, "kids are a source of constant joy?" It could not have been a parent. I remember waiting for our little whippersnapper to say his first word. I asked my wife, "Isn't it time the baby said daddy?"

My wife replied, "No I've decided not to tell him who you are until he gets a little stronger."

* * * *

Speaking of firsts. Did you hear about the young husband who arrived home from the office only to find his wife very upset?

"What's the matter darling?" he asked.

"Oh, I've had a dreadful day", the wife replied. "First, the baby cut his first tooth. Then he took his first step. And then he fell and knocked out the tooth."

"Then what happened?" Asked the husband.

"Oh, darling," she wailed in a shocked voice, "then he said his first word."

Until next time . . .
Keep up the good work

CONTINUED

ADULT EDUCATION: GROWTH FOR VO-AG IN THE EIGHTIES

life expectancies, shrinking and abbreviated work weeks provide more leisure time for people to pursue a vocational and secondary vocational interest. Numerous enrollees in adult classes in production agriculture are part-time farmers. Substantial numbers of adults are also interested in enrolloing to pursue and develop their creative talents. Vocational agriculture has much to offer, even to those looking for knowledge and skills which will provide therapeutic or hobby interests. Vocational agricultural education and legislation should seek to fulfill these needs as well.

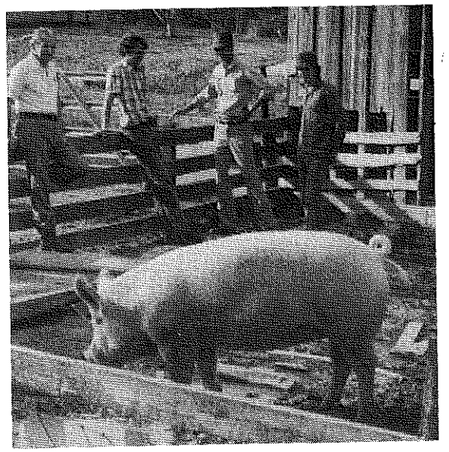
The advantages of providing continuing education in agriculture are numerous. Just to mention a few: (1) technical information keeps the enrollees and the teacher abreast of current developments; (2) adults are eager to learn and attend through self-motivation; (3) the adults are intelligent and can profit from the instruction; (5) instruction prevents retrogression and community stagnation; (6) schools need the support of the community adult population, and what better way to get it than through involvement; (7) adult education more fully utilizes expensive school facilities to their optimum; (8) teachers improve and learn from the adults just as they learn from each other; and (9) it extends the influence and scope of the school program in the community.

FUTURE TRENDS

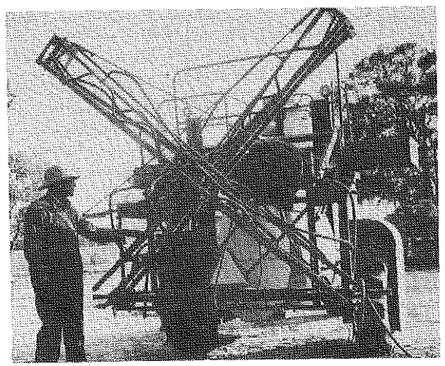
Looking to the future, vocational agriculture needs to expand its offerings in adult education. Many people in production agriculture are not being served through the young farmer/adult farmer programs currently available. Additionally, expansion is needed to serve adults in the other taxonomy areas such as sales and service, agricultural mechanics, horticulture, agricultural products, forestry and natural resources. The desire is there on the part of the adults, the legislation supports the efforts, the state supervisors and university personnel encourage expansion, and now those on the cutting-edge (the teachers) need to accept the challenge of fulfilling these needs. Continuing education will be the major potential growth area of the eighties. This growth will encourage a total, comprehensive program of vocational agriculture to exist in the next decade.

STORIES IN PICTURES

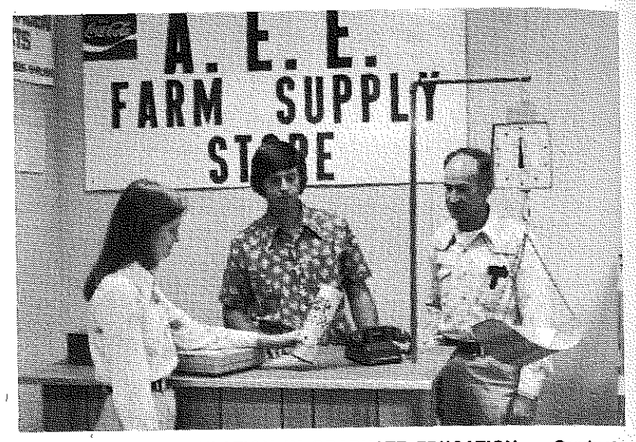
by Joe Sabol



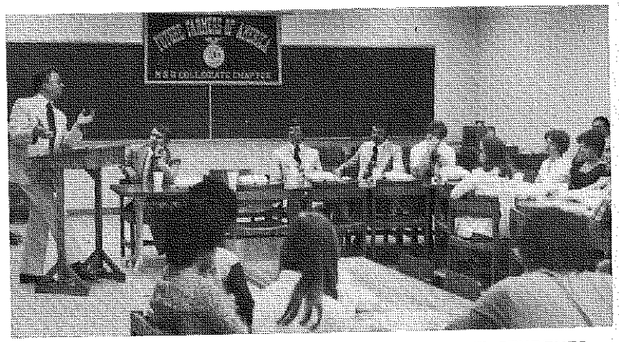
Supervision of the student's Occupational Experience Program gives Mr. Paul Holley (left), District Supervisor and Mr. Joe Scarborough (left center), Vo-Ag teacher, an opportunity to discuss the swine program as well as career goals with a student and his father. (Photo courtesy of Jim Johndrow, Auburn University.)



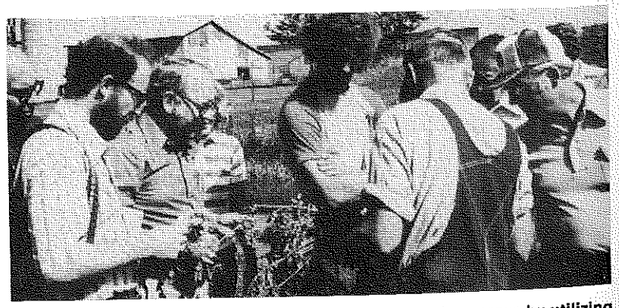
This Hi-Boy was recently purchased to facilitate spraying soybeans and peanuts. Albert Lampkin keeps his equipment in good operating condition, according to principles taught in Adult Education classes in Dodge County, Georgia. (Photo courtesy of Dr. Ira Hicks, The Fort Valley State College, Fort Valley, Georgia.)



AGRI-BUSINESS SIMULATION IN GRADUATE EDUCATION — Graduate students in the Department of Agricultural and Extension Education, Mississippi State University, practice using the agri-business mini-laboratory established in the Department. The mini-laboratory is used to develop technical competencies in agri-business and to study appropriate techniques and methods of teaching agri-business. The students are (from left to right): Pattie Miller, Larry Martin, and William Patterson. (Photograph by Jasper S. Lee, Mississippi State University)



NOON LUNCHEONS POPULAR WITH MSU GRADUATE STUDENTS — William L. Bost, Director of the Mississippi Cooperative Extension Service, is shown speaking to graduate students and faculty members during a box luncheon. The catered box-lunch seminars have been well received by students and faculty in the Department of Agricultural and Extension Education, Mississippi State University. (Photograph by Jasper S. Lee, Mississippi State University)



Dr. Edgar Persons, University of Minnesota, gets an idea across by utilizing a field trip to a farm. Vo-Ag teachers enrolled in his Adult Farm Mgt. course can readily adapt to Dr. Person's technique. (Photo by Mr. Sung Soo Kim, University of Minnesota.)

AGRICULTURAL EDUCATION

Volume 52 Number 6

December 1979

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