News to me

The fifth National Young Farmer Educational Institute will be held November 28-December 1 at Greenville, South Carolina. The Jack Tar Pavilion Hotel will be the site of the Institute.

Still is now known to be not a substance, or a mixture of useful chemicals, but a phenomenon of the utmost complexity whose delicate balance is easily disturbed and whose complete interpretation is yet far off.
—Paul E. Evans, DESERTS ON THE MARCH

Agriculture's ability to feed and clothe the 300 million people expected to inhabit the United States by the year 2000 can be assured only if the farmer receives an adequate income for the use of modern equipment and technology while meeting his labor costs.
—New Holland News, Vol. 17, No. 1

Food is one of the urban consumer's biggest bargains. Those of us involved in agriculture need to help get the story told. To understand agriculture problems in relation to their own, our urban neighbors need to look beyond the price of food, to learn where the food came from before it was placed in a can, and the how and why of its cost.

Cow business is the biggest piece of American agriculture. It uses more land, requires more feed, produces more market value of product, and a front and center at more American meals than any other livestock or crop.
—Herrell DeCrest in RISE PRODUCTION AND DISTRIBUTION

Almost every 'economy drive' concentrates upon the 'high costs' of the farm program in the Federal budget, and totally overlooks the devastating impact of what is happening to farmers and their incomes upon unemployment and inadequate growth throughout the whole U.S. economy.
—Leo H. Roenker in AGRICULTURAL AND THE PUBLIC INTEREST

BROADENING THE OFFERINGS
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This issue is devoted to a consideration of the need for broader educational opportunities in vocational agriculture. Many worthwhile and thought-provoking articles were submitted. Due to the obvious limitations of space, time, and the editors' judgment many stimulating contributions must wait for a subsequent issue.

On a well in a barbershop in Clinton, N. J., many months past, hung a sign informing all barbershop philosophers. "Any fool can criticize and most of them do." This served as a sort of incitement when arguments waxed at a higher than necessary pitch. This reference is not intended to suggest that critics of the present vocational agriculture programs are necessarily fools; it does suggest, in an elliptic fashion, that many critics of vocational agriculture utilize a background of profound ignorance in arriving at their conclusions.

Ever an educational program has kept pace with changes in individual and community needs, vocational agriculture merits an accolade. From its beginning vo-ag trained to meet students in school, young people out of school and adults. The recent "discovery" of the problem solving approach to teaching is old hat to vo-ag teachers. The realization that close cooperation between home and school; teacher and student; parent is necessary for truly effective learning has been a cornerstone of vo-ag philosophy and a basic element of its methodology since its inception. The use of community resources, local advisory committees, and close working relationships with other agencies has likewise been a hallmark of the vo-ag program.

In common with many other aspects of rural education, vo-ag has experienced a chronic deficit of qualified instructors and a financially disadvantaged position. In spite of these handicaps research has shown that students trained through vo-ag have been highly successful for over years. Vocational agriculture programs have been so well managed, employed, either as workers or managers, at the 90-95% level five years after graduation.

In the immediate future vocational agriculture faces challenges of greater complexity and magnitude than ever before. To meet these challenges successfully will require the application of the time-tested principles and methodology. But it take more than this. The prestige of the state leadership and the willingness of the community to accept broadened responsibilities of technology in education is education will certainly have an effect on existing education programs.

The "lower" occupational and educational aspirations of rural youth via a rural urban and suburban youth has been heralded for a decade or two by some sociologists and even by some vo-ag educators. There is little substance to support such statements. The scales and measures used to arrive at such conclusions are reflective of the inherent intellectual and educational mobility that seems to be a part of our culture. Why is the desire of many students for graduation raised as a lower aspiration than a preference for the law? It is this editor's opinion that lawyers have succeeded in creating an unhappy taste in the administration of justice. The operator of a modern farm business creates new wealth; the lawyer and other professional or service occupations do not. It might be said that in urban and suburban areas people live off one another; farmers live off the bounty of the good earth.

Vocational education has recently been plagued with a plethora of movements calling for "accountability" based on the occupational status of graduates. A bit of this is certainly justified. However, to assume that every student pursuing vocational agriculture must perform to substandardly engaged in an agricultural occupation is silly to assume that students who take a commercial or business course must end up as clerks, typists, stenographers, secretaries or accountants.

The influence and pressures which weigh upon the career choices of students in high school or post high school programs is the curriculum followed. The curriculum followed in secondary education. It might be well to evaluate the effectiveness of vocational agriculture in the same way that we contract teaching does. We can guarantee that, given a student with a certain level of intelligence, aptitude and interest, vocational agriculture can provide him or her with the skills, techniques, attitudes and abilities to qualify for occupations at this level requirements of an agricultural occupation.

What occupational or career choices the individual makes after graduation or school-leaving is influenced by many factors unrelated to the curriculum followed. The draft board, parental pressure, employment opportunities, social and cultural forces and myriad other personal reactions may well be the deciding factor in career or occupational choice.

As at certain night follows day, vocational agriculture will have to continue to justify its existence. This is all to the good. But the process, let us not be ashamed of training men to gain from the money, exercise thrift, leadership and patriotism. There are necessary ingredients for the future of America.
BROADENING OFFERINGS IN VO-AG

Dr. Claude V. Martin
Professor, Agricultural Education
University of Maryland, Eastern Shore

More than two hundred and fifty leaders in Agricultural Education, representing forty-seven states, met in Denver, Colorado, in May, 1971, to map plans for the future of agricultural education. The most salient points discussed were broadening the offerings in VO-AG, to extend from kindergarten through grade twelve and beyond high school. Consequent to the increasing need for broadening the offerings in VO-AG, the prevailing mood throughout the seminar was of urgency and optimism. Perhaps it has been a long time since so many knowledgeable participants were willing to come to grips with the problem, separating the conflict between beautiful idealism and stark reality. Extraordinary attacks on the program in VO-AG demands extraordinary counterattack. Our one but defense is to meet the needs of those seeking knowledge, information and careers in the wide and wonderful world of modern agriculture.

As the elementary schools should be offered as general education on an appreciation level. Even in the formative years, one should know where food, clothing and shelter come from. The idea of safety, conservation and sanitation should be taught or nurtured early in the lives of our children. The offering on a junior high level to both sexes should be mainly exploratory — an introduction to agricultural education careers. Some technical courses in VO-AG and small-scale natural resources should be offered at this level due to the high incidence of drop-outs before students have had an opportunity to learn about agricultrally related occupations.

The offerings on the high school level should be broadened in several directions: (1) The course offerings should extend beyond production agriculture, they should embrace such offerings as horticulture, farm machinery and repair, farm welding, natural resources and the several

Why Not Simulated Classroom Instruction?

Dr. Bobby R. White, Assistant Professor
Department of Agricultural Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia

One does not need to have been studying in vocational agriculture to know what the students and teachers need. In fact, the main activity that students and teachers need is the capability to communicate effectively and in writing.

Basic communication skills are emphasized throughout the simulated classroom instruction. The student was afforded the opportunity to work with and to know his students in a familiar setting. All students were familiar with the situations in which they would find themselves. Applicable and relevant instructional materials increase the student's desire to learn and excel. Efforts were made at all times to improve the student's ability to communicate both verbally and in writing.

There are many advantages in using the simulated classroom instruction. The teacher is in a better position to supervise the training and learning phase of this instruction. Scheduling of other academic classes is less difficult because the student's daily schedule is not disturbed. The teacher is able to concentrate his efforts and time upon one training location that allows more time for individual student attention.

With simulated activities the teacher can develop a more realistic and meaningful learning experience for the student, whereby the student can better prepare for later employment. The teacher is required to spend time in preparing such simulated experiences, but how better can time be spent than in the preparation and training of young men and women who are America's future.
MEAT INDUSTRIES—AGRI-BUSINESS PILOT PROGRAM

Gerald Milkenko, Coordinator
Cooperative Vocational Education Project
Whitehall, Wisconsin

As the Vocational Project developed, research was conducted to determine the employment possibilities and needs of the five communities so a greater effort might be made to retain more of our youth within the area.

Research showed that there is a considerable amount of meat packing business in the area plus a considerable number of meat processors ranging from two specialized businesses employing several hundred workers to six medium-sized, diversified businesses employing from two to twenty workers.

When the students were approached, it was found that each school had from three to five students with an interest in the meat industry.

Arrangements were made to visit outside facilities rather than have meat lab within the school. In cooperation with local meat buyers and processors, the students are able to have access to a meat cutter, a meat cutter, and a meat helper.

From the technical classroom training phase, which lasts for three weeks, the students along with Mr. Peterson move on location for their first evaluation and practical experience. In the plant, students not only observe areas of slaughter, cutting, and selling but also perform the various tasks.

The students spend some time studying the confinement and quality of carcass as well as part of their course. They also receive instruction from the state meat inspector.

The course is presently in its second year of operation and averages from 20 to 24 students per year from the five participating schools. The course is scheduled for the first two periods of the day and the students are transported to the central location.

The follow-up of graduates shows that they have entered the apprenticeship meat cutting program which has now been made available to the entire District #12 Vocational Technical School located in La Crosse, and are employed in retail sales, packing plant operation, with several continuing their education in related fields.

Some of the problems encountered have been the lack of available text material pertaining to meat cutting and processing and scheduling students so that they may work all day. Outside of these minor problems, the project is felt to be highly successful in retaining students in local employment and providing them with the basic skills needed to be employed as a beginning meat processing employee.

RENAISSANCE REQUIRED IN RURAL EDUCATION

Dr. James C. Horses
Department of Agricultural Education
University of Nebraska
Lincoln, Nebraska

It is time for those interested in vocational agriculture to reflect upon the renaissance in suburban education and the changing nature of the agricultural education in rural America.

Individuals are at the center of this movement; participation rather than passive learning, is emphasized. Thinking and problem solving rather than memorization of facts is stressed. Effective guidance and community cooperation are essential."We learn as we go" is an excellent teaching-student, rather than subject matter-oriented. Individuals prescribed instruction permits a learner to proceed at his own pace.

Flexibility enhances individualizing of instruction, flexible and modifiable scheduling and ungraded systems allow for a variety of interests and rates of learning. Convertible, large-small classrooms without walls along with versatile furniture and equipment permit a wide variety of uses for learning activities both individually and over a long range. Mobile instructional units on wheels, year-round schools, correspondence courses and traveling teachers add versatility.

Teacher is improved and is concerned with more than the mind. Supportive teachers are the physicians, nurses, social workers, counselors, psychologists, speech therapists and specialists in administration, research and remedial reading. Para-professional aides and technicians round out differentiated staffs.

Organizations has been toward solidification, unified, multi-purpose programs. This has enhanced quality of facilities, teachers and supporting services. Area vocational schools, university extension centers and junior colleges pool intellectual and cultural resources.

Curricula are being broadened. Community centers course of study are more developed and conducted cooperatively with the community utilizing all community resources in learning. Educational programs focus on special needs and the disadvantaged. Academic, cultural, and vocational aspects of curricular and guidance are being "integrated" at all levels from pre-kindergarten through adulthood; capitalism. The experience, natural interests and motivations of all ages. General education is oriented toward the world of work and vocational programs are deliberately designed to feed back into academic work. It is my understanding that, New York City, recognizing the importance of productive work for each family and the community and the need for all to have a marketable skill.
PLANNING YOUR VO-AG PROGRAM FOR THE SEVENTIES

Dr. Ralph Woodin
Professor of Agricultural Education
The Ohio State University
Columbus, Ohio

Long time programs for vocational agriculture are an important means of preparing teachers to meet the many challenges of the future. Successful programs are useful at state and district levels but especially for local departments. The following is not a full time program for every department of vocational agriculture. It helps the teacher of vocational agriculture find his place in the community.

1. Outlines the job of the teacher of vocational agriculture.
2. Outlines the job of the teacher of vocational agriculture.
3. Makes it possible to put "first things first." 
4. Provides for continuity of a program even with a change of teachers.
5. Makes it easier to "sell the program to the community."
6. Leads to better community support.
7. Develops the concept of "our program and our responsibility" instead of "my program and my responsibility."

Before the teacher starts planning such a program, it is assumed that the local situation is known; that some evaluation of the current program of vocational agriculture has been made, and that important strengths and weaknesses of the program have been determined. Information on the community, its agriculture, and its school will be helpful in understanding the situation and in preparing a tentative plan.

If we believe that representatives of a community should assist in planning the agricultural education program, then the teacher should be prepared to utilize this resource. This suggests that the teacher develop a tentative plan that can attract such assistance.

8. The teacher should be prepared to utilize this resource. This suggests that the teacher develop a tentative plan that can attract such assistance.

In order to assist teachers of agriculture to become in-service courses for high school students in off-farm agricultural occupations, the staff in Agricultural Education at Virginia Polytechnic Institute created a series of in-service courses for high school teachers in the state during the last two years.

One of the purposes of the program was to determine which of the off-farm occupational experiences programs they should offer that would best serve the needs of their students and the agricultural business in their community areas.

In order to assist in solving this problem, the teachers were asked to make a survey of the employment opportunities in the agricultural businesses in their school community areas.

The teachers solicited names of the businesses, the number of people employed, the number of additional employees needed, and the number of additional employees needed within the following 3 to 5 years. They also collected data concerning the kinds of products handled and the kinds of work that additional employees would be expected to do.

Data were obtained from surveys of 789 agricultural businesses in 79 school community areas. In some school areas many surveys were not made of all of the respondents. In the area of study, some teachers collected only one type of information such as agricultural marketing.

The data gathered varied in the school area. The largest area of data was not collected in the area of study. The largest area of data was not collected in the area of study.

The types of jobs listed in the business were 3,383, 3,383, and 3,383 each. The data summarized in Table 1 showed that 3,383 employees were employed in the 79 business areas. The business areas indicated that 3,383 additional workers would be needed in the following 3 to 5 years. The data summarized in Table 1 showed that 3,383 employees were employed in the 79 business areas. The business areas indicated that 3,383 additional workers would be needed in the following 3 to 5 years. The 79 school areas which were surveyed, represented approximately 210 classes of 15 students each, or 3,383 additional workers would be needed in the following 3 to 5 years.

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A new “aquacultural” industry catfish farming is emerging. Traditionally, American agriculture has been concerned with water farming. The catfish industry involves (1) production, or catfish farming; (2) processing the harvested fish crop; (3) supplies in the form of food, chemicals, and medications; and (4) equipment, such as boats, pumps, aerators, seines, and tankers. All of these aspects of catfish aquaculture introduce new agricultural occupations. Likewise, persons employed in these occupations need at least an elementary knowledge of catfish culture and fish biology.

Fish farming has been carried on for many years. Chinese history reports the culture of fish from about 2,000 B.C. In the middle ages in Europe “stewpots” became important. There were ponds in which living fish were stored. Wild fish were caught in the streams in the autumn and stored until needed as fresh food in the winter. Some fish were allowed to remain in the stews throughout the winter and spawn in the snow. Thus, the fish reproduced and fish farming was underway.

Very little fish culture was practiced in the United States in the 19th century. The early interest, in the 1920’s, was with fresh fish, primarily minnows. Interest in fish culture greatly increased in the 1950’s, especially in trout farming in the mountainous western states. Little was known about catfish farming until 1960. Today catfish farming is established well enough in some areas to be regarded as a basic industry. Catfish farming has passed other cultured fish crops in dollar value. The number of pounds of catfish produced has nearly tripled in the last three years and in 1969 was valued at about $20 million. Catfish are grown in the southern tier of states reaching across the United States. The leading states in the culture of catfish are Mississippi, Arkansas, and Louisiana.

Catfish grow naturally in many of the streams and lakes of the United States. There are around 1,250 known species of catfish, of which 50 species are found in North America. Most species of catfish prefer the warmer climates of the southern states with longer growing seasons. Catfish are easy to distinguish from other fish. The most distinctive feature is the barbels, or lumps, about the mouth and the thick, scale-less skin which covers the body. A few species have been tried in commercial culture and the channel catfish (Ictalurus punctatus) is preferred by most catfish farmers. Channel catfish weighing one to three pounds are most desirable as food fish. With careful management, a channel catfish can usually be harvested in two growing seasons, or a little less than two years.

There are five types of catfish farming programs: (1) food fish, (2) brood stock, (3) fry raising, (4) stocking, and (5) fish for catch-out ponds. Together, these make up the production aspect of the catfish industry. Food fish production involves growing fish for human consumption. Fish harvested at weights of about one pound so that each fish is the proper size for cooking whole. About a tenth of food fish can be produced per acre of pond, year "ponds. Brood stock production involves growing fish to sexually mature sizes of three to ten pounds for propagation. Channel catfish are small fish under ten inches in length reared to stock growing. Fingerling production included spawning the broodstock, hatching eggs, and raising fry to fingerlings. Stockers are intermediate size fish larger than fingerlings but weighing less than three-fourths of a pound. They are frequently used in stocking catch-out ponds which are open to public fishing. Press are used at harvest for the basis of, up caught or a flat rate per day combination of the two. The catch-out pond is for the sport fishermen rather than for commercially processing other food fish marketing establishments.

Catfish are currently being grown in two types of water structures: ponds and raceways. The water in ponds does not flow, while raceways are constructed so that the water flows. Fish are usually larger than raceways, however, the number of pounds of fish that can be produced per acre of raceway is much greater than pond production. Large volumes of water are required with both types of facilities, especially raceways in which the water should be changed twice per hour.

Catfish may be produced in cages allowed to have full access to water bodies. Cages are constructed of metal wire and are usually 3 by 3 by 6 feet in size. The volume of fish produced per acre of pond is about the same with both methods. Cages are relatively used, but do have several advantages, especially in streams or lakes that cannot be stocked.

Catfish can compete favorably with chicken, pork, and beef. As the price of other meats increases, catfish can compete favorably with other meats. The portion of the per capita meat consumption — less than one pound annually. Fattened catfish have excellent flavor, are easy to eat, and are easily digested in a variety of ways. The high protein ratios feed in catfish culture remove any trace of their natural habitat as scavengers. The pattern of consumption is more uniform throughout the year.

Catfish have traditionally been fed on fish meal along the Mississippi Rivers. But as migratory people occur, catfish are being replaced in many other areas need persons who are educated in catfish culture. The required educational needs vary considerably. Due to the restraints of the industry, many of the people working in it lack the education that is needed. Many phases of the industry, including the farmers growing the fish, are using trial and error in the development of methods and techniques of production. Fishery biologists are needed to conduct research on catfish production. Through out the industry specialized skills are needed. It is the best way to learn the necessary skills has been by practice. The local teacher of agriculture or the vocational agriculture teacher provide the best way for students to learn the necessary skills has been by practice. The local teacher of agriculture or the vocational agriculture teacher can provide valuable assistance in the educational program for many of the occupations, especially those requiring less than professional degree.

Persons interested in catfish farming need to become knowledgeable in elementary fish biology. This difficulty when little has been written and research is beginning to be done. Catfish farming has been initiated in the past two years. Teachers in vocational education are preparing instructional materials. Teachers in areas where the industry has not flourished should be acquainted with these materials.

The facilities shown were constructed by a cooperative venture of the Mississippi State University and the Mississippi Agricultural experiment station. The structures will be used for catfish culture. A total of about $40,000,000 per year. When a length of one inch is reached the fish will be ready for harvest. A total of 50,000 fish will be produced. A total of 50,000 fish will be produced. Each pound of fish produced will be worth $1.50. A total of 50,000 fish will be produced. Each pound of fish produced will be worth $1.50. A total of 50,000 fish will be produced. Each pound of fish produced will be worth $1.50.
PROJECTIONS AND PROSPECTS

H. N. Huntaker
Department of Health, Education & Welfare
Office of Education
Washington, D.C.

It is predicted that during the 1970's the terms "Vocational Agriculture," "Home Economics," and "Agricultural Education" will be changed to "Vocational Agriscience," "Home Science," and "Agricultural Business" respectively. This change is compatible with the 1967 report's desire to continue to equate "agriculture" with "farming," but for the first time, includes a new word, "agribusiness," which encompasses both the production and processing of livestock and all aspects of the off-farm industries of agriculture. A comparison of the definitions in the various dictionaries and glossaries establishes authority for the new directions and concepts which our profession has been continuously moving. Let us examine this definition thoughtfully and honestly, the benefit of entrepreneurial preparation which it implies: (a) A combination of the production operations of a farm (ranch, greenhouses, nurseries) and, in varying degrees, the services associated with them; (b) the development of inventories, facilities, equipment, fertilizers, and supplies for a new niche of small businesses and distributors of farm commodities including feed, food, fiber, and feed; and, the conversion, production, promotion, and marketing of new natural resources.

Due to this evolving change in emphasis on entrepreneurial and agribusiness education by 1979 it is estimated to exceed 1,253,971 students enrolled in agricultural vocations in 1969. Furthermore, by 1979 it is estimated that 55 percent of all students enrolled at the secondary and junior college levels will be training for entrepreneurial and agribusiness career objectives. The number of first-year college students in agribusiness is anticipated to be 5 percent with objectives in farming and ranching. Also, a significant number of high school students enrolled in vocational agriculture will continue in farming and ranching. (1) A combination of the production operations of a farm (ranch, greenhouses, nurseries) and, in varying degrees, the services associated with them; (b) the development of inventories, facilities, equipment, fertilizers, and supplies for a new niche of small businesses and distributors of farm commodities including feed, food, fiber, and feed; and, the conversion, production, promotion, and marketing of new natural resources.

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In the twelve years since the vocational agriculture program began in the Eastern Lancaster County School District, the program has grown from a modest in-school program involving one teacher to a comprehensive plan involving four teachers. Included in the present format are complete in-school vocational agriculture classes taught in any area of voca-
directive work-experience program. An active young and adult farmer group has many educational as well as community and social activities. Course offerings in elective agriculture in the ninth grade and several junior high school classes in the tenth through eighth grades round out the se-
cory and post-secondary agricultural activities. There is an agricul-
tural program in the elementary school which, at the present time, involves all the pupils in the school district throughout the district. The Outdoor Recreation Laboratory being developed for use by the entire school district under the auspices of the vocational agriculture department is the most recent addition to the program.

The time and effort involved in broadening a vocational agriculture program is considerable. Probably the first step is a critical examination of the existing programs. This means a critical evaluation of the strengths and weaknesses of the program to be carried out truthfully. Then a determination must be made concerning the nature and weaknesses. If the shortcomings indi-
cate a need for an expanded program, rather than failure of the existing one, then some new program might be con-
sidered. For example, many depart-
ments have an expanded program to meet the needs of students interested in agronomy especially in areas where farming experi-
cence alone might no longer be appro-

The decision-making process regarding broadened vocational agriculture programs is a complex one. It is an essential ingredient will be discussed in the next program. After the new program has been expanded and tested successfully, the old program can be reviewed and possible revisions incorporated. The program must be reviewed and revised periodically by a critical examination of the strengths and weaknesses of the program to be continued truthfully. Then a determination must be made concerning the nature of the weaknesses. If the shortcomings indi-
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A satisfactory placement and fol-

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The teacher of vocational agriculture should be able to place and follow up in students better than any other teacher in the public school. He visits the stu-
dents at home and gets acquainted with the student and parents. Putting it another way, a teacher who does a good job of student visitation and supervision will find it easier to do the placement and follow-up. The teacher of vocational agriculture is evaluated primarily by how many students get employed in the occupation in which they are trained. Even though getting employment in the field, for which vocational education has been trained is the primary measuring stick, there are other good indicators. These come from instruction in vocational agriculture that may be transferred to other occupations. For example, while preparation for the trades is not necessarily vocational education, it is a good example of the preparation a student may receive in high school. The teacher should get excellent training in the trades if he is to do the job properly.

The agricultural education magazine
and businessmen in the service area of the school. In communities an area
management needs direction. A study should be made to draw
provide information for students of vocational agriculture. The local school
must furnish the leadership for these placement aids, but valuable assistance
is available from local people.

Even though we are obligated by law to
follow up educational students,
this should not be the main
reason for determining what happens to
students after completing their training.
If a program is to survive and have
the support of the public, it is necessary that
a good public relations program.
be carried out. Therefore, placing
students on the job for which they are
trained is not enough. The public
must be informed about such placements as
these students are follow up over a
period of years.

The teacher of vocational agriculture
can collect valuable information from
a good placement and follow-up pro-
gram. Such information may be used to
enrich the instructional program. Also a
good follow-up program will
enable the agriculture teacher to develop
an adult instructional program that
will meet the needs of all who need
such instruction.

In summary, if students are properly
selected and well taught, if the voca-
tional agriculture teachers develop good
relationships with the students and their
families, if a good placement program
is executed, and if the students are
followed up for five years or more
there should be evidence that a good pro-
gram is in operation. Such a program
will also provide the basis for a public
relations program. In turn, such a
public relations program will enable voca-
tional agriculture to gain strong public
support.

Charles Ritter, former state and na-
tional FFA officer, is now a successful
agribusinessman. Ritter, who graduated
from Haxley High School in Monroe
County, Mississippi, was FFA state presi-
dent in 1951-52 and was national FFA
vice president in 1953-54. He worked
one year with the National Future
Farmer Magazine, and was employed
for a time as coordinator of student af-
fairs at Mississippi State University.
Leaving Mississippi State University
he was employed for about five years in
the International Department at the
First National Bank of Memphis. Since
1967 he has been executive vice presi-
dent of the Attalla Company, Kansas,
Mississippi. The Attalla Company
manufactures and distributes livestock,
fish, and dog food. Corn meal and fami-
ly flour are also manufactured by the
company. Ritter is on the board of
directors of the Chamber of Commerce,
a member of the Attalla County
Industrial Development Committee, a
member of the board of directors of the
Carrass Millien Federation (national
organization), a member of the board
of directors of Mississippi Fred MacDonald.

Charles Ritter gives vocational agriculture
and the FFA a large measure of credit for his
success in agriculture.

Association and a member of the Mis-
sissippi State University Development
Foundation and past membership chair-
man of the Mississippi State Alumni
Association, Charles, who was raised
on a small Monroe County farm, read-
ily admits that the FFA and vocational
agriculture are largely responsible for
his achievements.

Mickey Vorhough, a successful farmer
today, was FFA state president of the
Mississippi Association in 1956-57.
Vorhough, of the Balwyn FFA Chap-
coton last year produced an average
of 800 net pounds of lint per
Mickey attends an adult farming
taught by his former FFA advisor, O. E. Hevesy.

Farm manager, Alvin Woods, is state FFA
president in 1967-68. He is now
managing a 5,000-acre farm in
Hederman, Nolv, Jackson, Mississippi.
At the present time he raises cattle and
too are the main sources of income of
the farm.

Alvin's livestock management
includes 354 mature bred cows, 55
calf heifers, 150 heifers now being bred
for the first time, 273 stocker cattle
and 25 horses. Hay is about on the
30-30 crop grown on the farm. Last summer
Alvin put up 20,000 bales of hay.

In addition to being state FFA presi-
dent, Alvin received his American
Farmer degree in 1968. He placed third
in the state public speaking contest.
He showed beef cattle in the 7-8
grade until two years after finishing
high school. In his work, his chief
achievement was showing the Grand
Champion Angus heifer at the Mid-
South Fair in Memphis.

Alvin is a member of the Farm
Bureau, a member of the Board of
Directors, Lincoln County Farm Bureau,
member of the Angus Association,
Mississippi Cattlemen's Association,
and vice president of the Forest Hill Chap-
ker of Commerce.

Two State officers of the Minnesota FFA, left to right: Lowell Miller, North-
field and Danny Sandmire, Lamberton are watching Minnesota's Commis-
sioner of Agriculture Jon Woldcof collecting the guaranteed water to 'kick
off Minnesota FFA's Operation Rain Gauge, W. J. Kortemski, State FFA
Exeuctive Secretary, is at the spectators' rastrum. (Photo from W. J. Kortemski)

Dr. Martin McMahon (left), Associate Professor of Agricultural Education, Uni-
versity of Minnesota, and Dr. Helio Thomas (right), Assistant Professor of
Agricultural Education, University of Minnesota, discuss Mr. Dannel Byler's doctorial thesis pro-
aposal. Illinois teachers were priviledged to have Dr. McMahon as a visiting profes-
sor during the first fouo weeks of the sum-
eer school session. (Photo by David Car

Mickey Vorhough is a product of vocational
agriculture and the FFA. He now attends adult
Farmer classes taught by his former FFA advisor, Mr. C. O. Hevesy.

Managing a 5,000 acre beef and dairy v
Mickey Vedons, (left) in addition
to his career in farming, Alvin is a dairy
producer and community leader. He pools
his farm for the benefit of vocational
agriculture and FFA.

Mr. Charles J. Hartshorne, a senior in Agricul-
tural Education at the University of Nebraska,
completes an individualized learning assignment at one of the study
centers in the Ag Ed Laboratory. Under the
supervision of Dr. Roland Hawkins and Ken
Dillon, students utilize mediately
individualized materials for their methds
and program planning courses. (Photo by bobert W. Walker)

THE AGRICULTURAL EDUCATION MAGAZINE

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"A salable skill for every graduate" is the goal of many vocational education programs. This brings to the educational enterprise great responsibility. This responsibility goes far beyond the classroom and the occupational laboratory. The physical facilities, along with the equipment and instruction, are dedicated to developing a salable skill for every graduate; however, the question arises, "What is being done in the area of placement?"

Placement and follow-up of graduates are vital in evaluating accountability of vocational programs from the standpoint of the student, the business and industry, and the vocational instructor. The student hopefully desires to become gainfully employed or to become a successful employer. Business and industry is interested in employing trained personnel and the vocational instructor accepts this challenge.

The Four County Joint Vocational School serves four counties in Northwestern Ohio. The placement and follow-up service is a part of the Guidance Department and has five basic steps or functions.

The first step is to survey business and industry preferably by interview. The business and industries are contacted by using the Dictionary of Occupational Titles. The company name, address, person to contact, number employed and annual need for employment are put on a 3x5 card and in alphabetical order by title for quick reference. Summary information from the survey is compiled and presented to all junior and senior students. This information is helpful in many ways.

The second step is orient business and industry to the placement procedure. Each business and industry is invited by letter to Business and Industry Day, which serves two purposes. Student representatives from each vocational program serve as tour guides for the company officials as they visit the areas related to their employment needs, then a complete explanation of the placement procedure follows.

The third step is to identify job opportunities. The letter to secure the job title, description, compensation, and other information is mailed to all business and industry along with a list of all vocational programs offered. The job openings that are reported to the placement office are then put on the job opening form.

The fourth step is to arrange for interviews. The job openings are presented to the appropriate vocational class and names of interested students made available to the prospective employer.

The student's application, education by his instructor, grades, attendance record and any information available to the prospective employer provide the student's interview. Those students not employed by the time of graduation are mailed the list of job openings. Interviewing facilities are available if the student or the student goes directly to the employer's plant.

The fifth step is to follow up each graduate, preferably in person. This is the most informative step as it affects the objectives of the vocational training. Each graduate is contacted and interviewed as to his evaluation of his training, and his employer is also interviewed. This information is used for state reports.

Five step placement and follow-up procedure provides valuable information in terms of the accountability of a program.

The area of Agricultural Mechanic for example, included 17 graduates. Of these, 1 entered the armed forces, went on for more training, 9 were employed in their field of training, 9 were employed outside their field of training, the average starting wage for those employed in agricultural mechan- ics was $53 per week and the student was beneficial in that the training was beneficial and adequate with situations being for more training.

MR. MEINKE as the left interview applicant mechanics graduate Tony Hamer in his mechanics position. The interview was arranged through the guidance department at the Four County Joint Vocational School.

Mr. SCHWEIBER, mechanical skills in electricity and electrical systems. The employers' reactions were also favorable to the training was beneficial and adequate. They suggested more training in the use of the instruction book and seeing something to students with two years of training, since that graduating class had only one year of training.

Mr. SCHWEIBER, mechanical skills in electricity and electrical systems. The employers' reactions were also favorable to the training was beneficial and adequate. They suggested more training in the use of the instruction book and seeing something to students with two years of training, since that graduating class had only one year of training.

The following article is based on Virgil Martinson's Ph.D. dissertation, "Similarities and Differences Among Wisconsin Youth Who Have Become Established in New Discontinued Farming." University of Wisconsin Agricultural Library, January, 1970.

Young men will continue to make occupational decisions and one of the careers chosen may be farming. A poor, unskilled, or unrealistic choice constitutes a delay to establishment in an occupation. Insight concerning the similarities and differences of those who became established in farming and those who leave the farm may be of considerable interest and help. Does the farm situation, such as the number of brothers, the father's satisfaction with farming, the above and below, and the socio-economic rating of the home farm, contribute to establishment in farming? How well did the individual achieve scholastically in high school? Of what value was the vocational agriculture and extension programs to them? Did those who are farmers have a greater opportunity to learn the business of farming through greater involvement and responsibility while at home on the farm? Does it make any difference what method is used in a beginning in farming? What percentage of persons were farming for a period of time following graduation in 1957 from thirty-one high schools in Wisconsin?

Similariites

Individuals who are presently farming are the same as those who have left the farm are similar in the following ways:

1. With one exception, members of both groups indicated that vocational agriculture had been helpful to them.

2. There was no appreciable difference between the two groups as to the number of brothers and present occupational status. Seventy percent of those presently farming had two or fewer brothers as compared to 80% of those not presently farming.

3. There was no appreciable difference in regard to the father's satisfaction with farming. When the degree of satisfaction was computed, it was found that 80% of the farming family as compared to 82% of the non-farming family indicated that the father's satisfaction with farming was rated above average.

4. There was little difference in the kind or extent of participation in 4-H or FFA.

5. There was little or no difference of the socio-economic rating of the home farms from which the two groups came.

Differences

The differences most evident between the two groups were:

1. Those presently farming were enrolled for a longer period of time

Walter T. Bjoraker
Teacher Education and Madison, Wisconsin

Virgil O. Martinson
Marshfield Junior High School

Marshfield, Wisconsin
in vocational agriculture. Seventy-eight per cent of the farm groups before and after the non-farm group had considerable financial support from the farming group had not been extensively by the group who had not farmed previously and were now farming. Two thirds of those presently farming had great knowledge of agriculture subject matter such as soils, crop, dairy cattle, and farm management.

3. Those farming at the present time had a higher level of job responsibility at home or on the farm than those who have terminated their tenure on the farm. Thirty-five per cent of those presently farming had general or complete farm labor responsibility while at home on the farm as compared to 17 per cent of those presently not farming.

4. The young men presently farming came from larger farms than did those who were no longer farming. Fifty-five per cent of the farming group came from homes with one hundred or more crop acres as compared to 38 per cent of the non-farming group.

5. Methods used to begin farming varied considerably. Sixty-seven per cent of those presently farming began their careers in some type of partnership or as an owner. Non-farmers who were presently farming had a similar arrangement. Seventy-seven per cent of those who have left the farm began farming by working for a board and room arrangement and worked an indefinite allowance.

6. Those presently farming from homes which had a substantial higher investment also farmed the same or more. In other words, those who are no longer farming gain up on a farm which had less than $20,000, investment, whereas only 14 per cent of those presently farming came from a farm which had less than $20,000, investment. Twenty-one per cent of the non-farming group came from homes farms where the investments ranged between $30,000 and $50,000. Only 7 per cent of those presently farming.

7. Credit was used more extensively by those presently farming than by those who are no longer farming, 78 per cent vs. 19 per cent.

8. Approved practices in livestock and crop production were used extensively by the group who are presently farming as compared to 17 per cent of the non-farming group.

Individuals presently farming achieved a high level of job satisfaction and were no longer farming, 17 per cent vs. 48 per cent.

9. Approved practices in livestock and crop production were used extensively by the group who are presently farming as compared to 17 per cent of the non-farming group.

Conclusions

Young men who are becoming established in farming are interested in post high school educational programs sponsored by departments of vocational agriculture. Thirty-eight per cent of those presently farming participated in educational meetings sponsored by the local agricultural department as compared to only 22 per cent of those who have left the farm. Twenty-seven per cent of the farming group attended meetings sponsored by the University Extension Service as compared to 13 per cent of those who have left the farm. The farming group had a greater proportion of farm students in short courses at the University of Wisconsin, in college attendance, and in special evening programs.

Working at home for board and room or working at another job an indefinite allowance are unsatisfactory methods for becoming established in farming. Only two of the twenty individuals who began farming under this arrangement are making progress toward establishment in farming.

Higher scholastic achievement was associated with establishment in farming. Eighty-four per cent of those who are presently farming achieved a grade average of "A" or "B" average while enrolled in high school as compared to 64 per cent of those who are no longer farming. Eighty-four per cent of those presently farming achieved a similar level of academic standing.

Wages received for work on the farm and wages from work off the farm are the most important means for accumulating the necessary capital to make a beginning in farming. About 75 per cent of the farming group indicated that capital invested in the farming business was derived from wages on other farms. Twenty-three per cent of the present farming group stated that wages from off-farm work were invested in the farming operation.

Not all who desire to do so are able to do so. Twenty-four per cent of those who are no longer farming indicated that farming is the most desirable way of earning a living. Eighty-four per cent of those presently farming achieved a high level of job satisfaction and were no longer farming, 17 per cent vs. 48 per cent.

Vocational agriculture teachers often complain about a lack of cooperation with their school counselors. To provide information on this subject, the writer completed a study designed to ascertain the factors which affect the cooperation of school counselors with agriculture teachers and guidance counselors. Forty-four per cent of the agriculture teachers provided follow-up information to the guidance counselor. Here were some discrepancies in the guidelines. Counselors stated that 85 per cent of the agriculture teachers failed to provide them with information as to the placement of agriculture students after high school graduation.

Recommendations

In view of a more complex and competitive agricultural, vocational agriculture, and school counselor programs concerning each other's programs within their respective school systems.

A careful study of the needs for larger captions and the changing demands in agriculture is necessary. School counselors are presently not well prepared to act as counselors for agriculture students to effective guidance and counseling.

The questionnaire conformed to the general instructions on the back of the questionnaire. The questions were designed to provide an estimate of the current status of agriculture teachers and guidance counselors in the schools. The results indicate that agriculture teachers and guidance counselors are cooperating in providing information to students about agricultural opportunities. However, agriculture teachers and guidance counselors have different ideas concerning the amount and type of information to be provided to students. Agriculture teachers believe that agriculture teachers and guidance counselors need to work together more closely in providing information to students about agricultural opportunities. However, agriculture teachers and guidance counselors have different ideas concerning the amount and type of information to be provided to students. Agriculture teachers believe that agriculture teachers and guidance counselors need to work together more closely in providing information to students about agricultural opportunities. However, agriculture teachers and guidance counselors have different ideas concerning the amount and type of information to be provided to students.

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continuing instruction in production agriculture

Trenisi C. Lewis
Vocational Agriculture Instructor
Mt. Herman High School, Louisiana

Because of our location and past history, the rural school can serve a valuable service in balancing the total program by continuing to offer instruction in the area in which we can make the most significant contribution. We live and work in a state which has a great potential for the agricultural producer, you and I. If the teachers of vocational agriculture abandon production agriculture, what will be the national food situation ten years from now?

At a time when the reserve food supplies of our nation are dwindling and the population trends indicate a greater need for food and fiber, it concerns me that many of our colleagues are going all out for the education of the teachers, and not making a similar request. The counselor was concerned with placing high school students in the college preparatory courses and agriculture teachers also admitted a desire to guide high school students into college, but both the counselor and the agriculture teacher blamed the other for failing to send these students through the college preparatory curriculum.

Recommendations
1. Occupational information should be provided by agriculture teachers to guidance counselors.
2. Agriculture teachers should inform agriculture teachers of the objectives of the guidance program.
3. Agriculture teachers should furnish the guidance counselors with follow-up information on agriculture students.
4. Agriculture teachers should involve counselors in vocational-activity programs and actual learning situations so that the counselors are informed about opportunities available to agriculture students.

SIGHT AND SOUND IN OCCUPATIONAL INFORMATION

Do you as a teacher of vocational agriculture find that a limited number of field trips and tours can be conducted during the school year? Factories such as distance, expense, and time missed from class restrict the number of activities that can be used to show students the various occupational opportunities available to them. These types of instructional aids are gaining popularity in the classroom and laboratory. Because of their versatility, they can be used alone or with other instructional techniques to bring personal information about the world of work to the classroom.

You do not have to be a professional photographer to produce every 8 mm instructional film. Many modern 8 mm cameras are so automatic that very little experience is necessary. For example, take a photograph of the soil on a field. Let us overdo the instruction in production agriculture, especially in rural areas.

Some Procedures to Follow

After choosing the activity you wish to film, each frame of the activity should be planned carefully. First, you will want to contact the individuals in charge of the business or industry and obtain their permission to film different activities and jobs. Make the first personal contact the key to obtaining future involvement and cooperation. You have to convince him of the importance of the project and show him the importance of his contribution. All the people involved are due an explanation.

To form a concept of the entire operation, everyone should give you a guided tour of the business or industry. Arrangements for introductions to those in charge of different sections and obtaining their approval, guidance, and cooperation. During the tour, routes should be made as to what activities should be filmed, bow, and when. Afterwards, a general outline should be planned including the sequence of events and appropriate time schedules. The 8 mm sound equipment allows great flexibility in time at the beginning and hastily drawn scripts will be shot without consideration of the closeness of the day. It is not the number of shots of the day but the film that is important.

Before the initial personal contact and tour of the industry, the Dictionary of Occupational Titles may be used to identify many of the jobs as possible. This will prove beneficial in identifying personnel performing their different jobs.

At this point you should be ready to produce your own film for your movie. These frames should be nearly constructed. If you can construct the least-cost film that can give your students a real sense of the activity, you can use your students to determine the feasibility of the activity. Remember, your instructor's booklet is a must in learning to use the camera. Consult with persons who use equipment and learn the specific characteristics of a movie camera.

C. Jordan Hudson, Jr.
Center for Occupational Education
North Carolina State University, Raleigh
VIDEOTAPE INSTRUCTION IN VOCATIONAL AGRICULTURE

Robert L. Campbell
Department of Agricultural Education
University of Wisconsin, Platteville

The general emphasis on increasing production within agriculture has resulted in the awareness of a critical disparity. The major factor in this disparity is the lack of trained teachers. All too often, the smaller rural community high schools are unable to attract the necessary teachers to keep up with the new programs. The shortage of appropriately trained teachers in this subject area is the major factor in the improvement of the effectiveness of the teachers.

In reference to the shortage of teachers in the agricultural area, instruction by means of videotape replay programs is a potential answer to the problem of increasing the effectiveness of the teachers.

Such an approach involves not only the students but the teachers as well. The teacher can talk directly to the student and show the film the student missed. The usability of this type of instruction is high because the teacher can talk to the student individually and adjust the presentation to fit the student's particular needs.

This program has been used successfully in several classrooms and has shown to be an effective way of teaching vocational agriculture.

Recommndations and Implications

Teacher training institutions will be called upon to fulfill a critical part in solving the dilemma challenging the vocational agriculture instructor. On the basis of the research findings reported herein, it is recommended that:

1. Efforts of colleges of agriculture to videotape learning activities for students be expanded. Students in the agricultural sciences perform as well when taught by videotape of instruction as do those taught in traditional classroom situations.

2. Video-taped instruction groups learned as much as those in the live instruction groups when learning was measured by the same means. The effect of method of instruction on performance was not significant.

3. Students taught by means of videotape demonstration scored significantly higher than students in all other groups. The videotaped replay of the teacher demonstration as a means of teaching College of Agriculture freshmen had limited effectiveness.

The attitudes of students toward videotaped instruction did not change significantly during the experimental period, but the students did the pre-experiment attitudes in favor of performance on the instructional tests. Students who were unsatisfied toward television teaching performed better as a group than those who had favorable pre-treatment attitudes.

With the exception of the group of students taught by means of television instruction, all comprehension scores were found to be significantly higher than all recall scores. Tests measuring comprehension learning offer better alternatives to evaluating the effectiveness of teaching methods. Traditionally, we construct examinations which measure learning at the recall level.

Finally, students who had not had vocational agriculture in high school performed significantly better in the video-taped course than those who had had vocational agriculture. Home environment of the students did not significantly influence their performance as students reared in small settings and those from farm environments performed equally as well.
THE IMPACT OF PARTICIPATING EXPERIENCES FOR AGRICULTURAL EDUCATION MAJORS

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Teacher education in agriculture has enjoyed a rich heritage in the past five years. Much of the agricultural success of this country can be traced to schools where successful programs of vocational agriculture have been in operation. Practical agricultural experience has been a requirement and a proven asset to teachers and students of vocational agriculture. The student of vocational agriculture has always conducted and participated in supervised occupational experience programs. Since all teachers of vocational agriculture should have had training in this area, they are cognizant of the fact that supervised experience is contributory to the successful performance of one's on-the-job responsibilities. This would be true in professional teaching circles as well as in the farm or agricultural business training fields.

The teacher who has had a professional teaching experience should be expected to adjust to a new situation more quickly than one who has not had this opportunity. Based upon this belief, the writer, in 1967, conceived the idea that a participating experience program for students preparing to teach vocational agriculture could prove beneficial to the teacher education program at West Virginia University. The birth of this idea resulted in serious thinking being given to operational procedures, establishing of guidelines, locating cooperating agencies, establishing a program of student activities, supervision of student responsibilities as they relate to teacher education personnel, the local school staff and the cooperating teacher of vocational agriculture. At that time it had not been determined whether the agricultural education training would welcome a program of this nature.

The program was planned to provide experience in a productive work setting to derive desired educational outcomes. The reader will, no doubt, recognize this as embodying the philosophic concept of learning to do by doing. That is, the prospective teacher is placed for a definite period of time with a competent teacher of vocational agriculture to develop planned productive competencies in an actual teaching situation.

This is not to be confused with student teaching since this program specifically precedes it. This phase of professional involvement actually gives strength and support to the student teaching experience.

Some educators believe that supervised field experience forms the core for vocational education. This philosophical view has strong merit, but it is difficult to prove beneficial to the teacher education program.

John Dewey was a proponent of "learning by doing." Through progressive educational experience programs, the student actually learns from his hands-on experiences in addition to what he receives in the classroom. The teacher and the student are both involved in supervising the experience. Vocational educators are aware that there is a continuous interaction between the student, objects, and other persons in his environment.

Based upon these ideas, it appears that the program has a great affinity for utilizing the graduate in his chosen area of proficiency. The cooperating agencies have been the County Board of Education, the program, twenty-five counties have been involved in the program. The periods of involvement by counties vary from one to five years. Several counties have been involved in the placement of the graduate in their schools, which they helped train. The graduate then knows the local school situation and the period of orientation becomes shorter.

The placement period for work experience normally begins around the third week of May and extends to the third week of August. During this period, the student is involved in as many professional experiences as possible to further acquaint him with the job of the teacher of vocational agriculture. In cooperation with these experiences, the student also obtains college credit in agricultural education. He may also prepare a paper based on his summer activities and complete related coursework through which both the student and the teacher can benefit. It is believed that this procedure causes the student to apply his talents to the task at hand in a manner that is directly related to the classroom.

A suggested program of participating experiences is designed as a guide for the student and supervising teacher. Some activities included in the plan follow:

**May**
1. Observation of regular V-Ag teachers in action.
2. Assist the teacher in closing the school term.
3. Meet the school faculty and participate in an activity involving them.
4. Attend and assist with FFA activities.
5. Assist the FFA advisor in supervisory visits with the teacher.
6. Look over the teacher's summer plan.
7. Closing school inventory.
8. Keep record of daily activities.

**June**
1. On-farm instruction with teacher.
2. Meet people in community.
3. Work in V-Ag shop.
4. Assist with training soil judging team.
5. Study teachers filling system.
6. Visit prospective students with teacher.
7. Study local course of study.
8. Assist with community projects.
9. Attend State V-Ag Teacher's Conference.
10. Assist State FFA Convention.
11. Supervise students on home farm.
12. Assist in preparation of County and State Fair exhibits.
14. Take soil samples for testing.
15. Attend local FFA meetings.
16. Prepare news releases for local paper.

July
1. Assist with FFA Officers Leadership.
2. Prepare final report for evaluation of summer experience.
3. Get ready to open a new school term.
4. Supervision of experiences programs.
5. Monthly activities report and time reports.

The agricultural education personnel at West Virginia University feel that this pre-professional experience has enriched the teacher education program through:

- Coordinating of theory and practice
- Increased development of understanding of people and human relations skills.
- Giving the student a greater sense of responsibility, and greater reliance on his own judgment.
- Giving a greater sense of professionalism.
- Giving the student a greater understanding and appreciation of the job of the V-Ag teacher.
- Giving the student an understanding of his role in a total school of agriculture.
- Providing contacts that are useful in later performance of professional responsibilities.
- Local school system benefiting from jobs performed by the student trained under direct supervision of the local teacher of vocational agriculture.
- Strengthening the trainees' student teaching experience.
- Making the school system a part of the teacher education program.
- Giving the agricultural education major an opportunity to earn while learning.
NEWS TO ME

A Repeat Reminder:

The South Carolina Association of Young Farmers will host the fifth National Young Farmer Institute November 23-December 1, 1971 in Greenville, S.C. at the Jack Tar Poinsett Hotel. The Institute had its beginning in 1967 when a small group of Young Farmers from several states conceived the idea of a national meeting for the purpose of exchanging ideas and information. From that small beginning, the Institute has grown each year and the fourth annual meeting in 1970 at Wichita, Kansas was attended by approximately 450 delegates representing about 22 states. The previous Institutes were held in Ohio, Texas, and Pennsylvania. Approximately 500-600 delegates from at least 50 states are expected for the meeting in Greenville, S.C. this year. Several states have indicated that they will be well represented with large delegations.

(Hugh McClimos)

Bankers with an understanding of today's agriculture appear to be in short supply in many rural areas. Some banks, particularly in the Midwest, early recognized a need for highly skilled people with agricultural backgrounds. However, there are still many opportunities in areas where changes in agriculture have been so rapid that local banks have not been able to keep pace with a demand for people trained to deal with an individual farmer's pressing need for capital to run his business.

Twenty years ago a farmer produced most of the feed for his livestock, marketed products locally, used inexpensive horse-drawn equipment, and operated on relatively small acreages. Modern farming has changed all this and in many occupations in agricultural business in the areas of banking, credit, insurance, land appraisal, and marketing, an employee must have a knowledge of farming operations, skills, and farming know-how.

Commercial banking firms are employing agricultural college graduates who have combined agricultural education with studies in economics and business administration.

There is little opportunity in agricultural college classes to learn skills and get practical experience in farming; therefore, the agricultural work experience you obtain while in high school is important. It will help you understand better some of the agricultural course work in college.

(New Holland News)

GENES FOR TOMORROW

Plant explorers are running a critical race against time. Their goal: collect as many of the world's primitive and wild plants as possible in the next 10 years. By then, scientists fear, much important uncultivated germ plasm will be lost.

Everywhere the march of progress, especially in developing countries, is decimating plant communities. Bulldozers uproot valuable species in the building of towns, roads, factories, and airports. Dams drown ancient habitats.

Coats graze many plants out of existence. And primitive varieties such as melons, once grown in rich diversity for local peasant marketplaces in Asia, are no more, their place taken by a few super varieties adapted to broad regions.

Civilization depends upon crop plants that are grown far from the centers of origin. Paradoxically, one of the major crop plants making up the bounty of U.S. agriculture, not only originated within our borders. Our agricultural system rests entirely on introduced plants that have been nurtured and dispersed over the centuries by farmers and plant breeders.

Valuable germ plasm has also been collected by USDA plant explorers who since 1898 have made over 150 global collecting expeditions and introduced some 350,000 collections. Many collections were put to good use but were eventually discarded so that today we retain about one-tenth of the early introductions in their original form.

(Agricultural Research, USDA)

The National Safety Council is going all out to reduce accidental drowning. Materials and films are available, not only from the Council but also from the Red Cross, Coast Guard, extension service, manufacturers of water recreation equipment and boats, etc. Also, the arc proven programs you could initiate such as NSC's "Operation Waterproofer 4th Grade."

NSC has a new water safety film entitled FIND A FLOAT. Many people drown needlessly each year often a full view of friends on the shore in boats who stand by helplessly. The people have within reach means to save drowning victims — only they don't know it. FIND A FLOAT shows viewers many ordinary items — poles, branches, spare tires, oars, picnic paraphernalia, etc. — which can be used to keep a person afloat until help can reach him. If viewers could regularly use these or other improvised flotation devices, many lives could be saved.

The film is color, 16 mm, 11½ minutes. Price: $75, with 20% discount to NSC members, 10% to governmental agencies. Stock No. is 079.01.