Stories in Pictures

ROBERT W. WALKER
University of Illinois

Kenneth Herschel (center), a vocational agriculture student at DeForest, Wisconsin, is selected for the position of a pig as a part of the Madison, Wiscon- sin, Crown Club’s national pig project. Kenneth Bledsoe, a member of the club, supervises in Wisconsin, and E. H. Abraham, the teacher of agriculture at DeForest, Wisconsin, (right) by Wisconsin Farm Bureau.

Dr. Paul Hump (center), Chairman of the Division of Agricultural Education at the University of Illinois, served as chairman of the 1969 Central Region Research Conference held at the University of Illinois, July 29-31, 1969. Keynote speaker was Dr. John C. S. (right), Director of the Center for Vocational Education at North Carolina State University. Dr. Paul Marsh (left), Professor of Agricultural Education at the University of Minnesota, will serve as chairman of the 1970 conference. (Photograph by Robert W. Walker.)

Featuring— INSTRUCTIONAL PROGRAMS IN AGRICULTURAL RESOURCES

Also— RELEVANCE THROUGH VOCATIONAL EDUCATION

by AVA President C. Nelson Grate (pages 137-138)
Editorials

Are We Ready for the Seventies?

Few decades of the past can rival the sixties for significance and importance in the development of vocational education in the United States. Within a five-year period in the decade, Congress enacted the major pieces of legislation designed to change the outlook and nature of vocational education and to establish education for the world of work as a principal part of public education. For vocational agriculture, the sixties brought unprecedented challenges and change. Early in the decade the very nature and purpose of vocational education in agriculture was stonewall challenged. The rules of the game were a mandate to expand vocational agriculture, which had been generally, though often reluctantly, accepted by the profession. As we enter the decade of the seventies, it is almost a certainty that neither challenge to change in vocational agriculture will diminish. Are we ready for the seventies?

Guest Editorial

What Direction for Agricultural Education?

Our profession is again in the midst of adjusting to new legislation, the Vocational Education Amendments of 1968. Other developments in Washington are also having their impact on agricultural education programs in the states and ultimately on vocational agriculture programs in local schools. Vocational agriculture is again "at the crossroads." There has been no more appropriate or urgent time for each of us to evaluate carefully what we are doing.

Use Local Facilities in Teaching Conservation

Harry Karpfak

Book Reviews

Technological Education and Vocational Horizons

James E. Fitts

News and Views of NVATA

Stories in Picture

(Continued on next page)

(Continued on next page)
Relevance Through Vocational Education

C. Nelson Grote, President
American Vocational Association

The jargon in education is born out of the need for jargon, the need for a public setting of their time and place in the history of our Nation. One such public vocabulary persists at a high level of popular culture, unlike its contemporary counterparts, with an aspect that has caused the conventional observer to reflect and contemplate what American education is. This problem is "relevant." Webster's New Dictionary states that "relevant implies a close logical relationship, and importance to, the matter of consideration." Relevant in education implies that education must have a close relationship with problems that society faces. "If we cannot teach kids to think, then we can't expect kids to drop out of American's high schools each year. We cannot afford to continue having 25 per cent of our high school graduates entering the world of work with few if any solvable skills. When 12 per cent of those who graduated in June of 1963 are unemployed by October of the same year and when 27 per cent of the non-whites from the same class are unemployed, how can we argue that their education was relevant? Neither can we suggest relevancy when the majority of boys and girls in our secondary schools are guided into college preparatory curricula by socially conscious parents and by teachers and guidance counselors representing middle class values. In addition, the labor market in the '70s will be able to absorb far fewer college graduates without some underemployment. The dichotomy of a national unemployment rate of nearly 6 per cent and at the same time serious shortages in the fields requiring skill and knowledge that the unemployed do not possess is another evidence of an irrelevant educational system."

The unanimous passage of the 1968 Amendments was a vote of confidence on the one hand and a mandate on the other hand to the President to write a new formula and the structure and the resources that they felt we could use effectively and at the same time take some priority based upon national need. They did so through the "set-asides" regarding service; we spend whatever money is authorized and appropriated. We must broaden our thinking in vocational education to broaden the total manpower needs of this Nation through a comprehensive program.

The Congress built into the legislation some assurances of comprehensiveness by establishing the National Advisory Committee on State Advisory Councils that are very representative in their composition. Concerned about requiring that state plans be submitted each year with projections which can be reviewed, the Councils of vocational education, represented by your distinguished Vice President, Dr. Ralph Linder, and the many men in the field dedicated to the task of providing "quality education and training," have chosen to write in terms of vocational education, as opposed to agriculture education, so as to serve the largest possible reading audience. In addition, each of our policy statements is supported by a diversity of examples and illustrations as opposed to a convergence of divergent dependant largely upon the knowledge of the writer as well as time and space.

Nelson Grote

THE COVER PICTURE
Kerstin Connors (left) and Larry Sparr, students at Warsaw [Illinois] Community High School, identify and produce tissue culture located in the school's tissue culture laboratory. These and other vocational agriculture students in the New Opportunity Program for Drop-Outs. (Photo by Robert W. Weiler, University of Illinois)

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Relevance Through Vocational Education

(Continued from page 129)

tional education but we would not be faced with some of the conflicts today with the Department of Labor or the issues with those representing the free enterprise system.

The Problem

While much could be said about the characteristics of relevance in voca-
tional education, let us concern ourselves with only three aspects of the total problem: the changing nature of the labor force, the changing job requirements; and the unique group of people to be served.

Changing Labor Market

The impact of technology is having a dramatic effect upon the labor mar-
ket and will continue to do so at an accelerating rate. Vocational edu-
cation has not been designed to be responsive to, or competitive with, new and emerging occupational roles. Often students are forced to complete the job training in one field and then transfer to another field without any of the skills and knowledge they acquired in the initial field being transferable. The result is a high rate of unemployment and underemployment.

The pace of technological change is so rapid that many people find themselves out of work before they have completed their basic training. This situation is particularly serious for those who have invested a large amount of money in education and training. They may find themselves with a college degree, but without the skills and knowledge necessary to compete in the job market.

In order to be relevant, vocational education must be designed to meet the needs of the labor market. This means that vocational education programs must be flexible and responsive to changes in technology and in the job market. Programs must be designed to provide opportunities for lifelong learning and career advancement.

The Changing Job Requirements

While it is difficult to generalize upon the specific nature of changing job requirements, it should be said that at any one time, most, if not all, are becoming more technical in nature. Moreover, since the late 1960s, the high rate of labor force participation by women has increased significantly. As a result, there has been a growing demand for vocational education programs that prepare women for employment in traditionally male-dominated fields.

In addition, the changing nature of the labor force has led to a greater demand for vocational education programs that focus on the development of soft skills, such as communication, critical thinking, and problem-solving. These skills are increasingly important in a rapidly changing labor market.

The Unique Group to Be Served

Vocational education must be designed to meet the needs of a diverse group of students. This includes students with disabilities, English language learners, and students who are socioeconomically disadvantaged. Program offerings and delivery methods must be flexible and adaptable to ensure that all students have the opportunity to succeed.

Conclusion

In order to be relevant, vocational education must be designed to meet the needs of the labor market, address the changing job requirements, and serve the unique group of people to be served. This requires a focus on the development of skills that are adaptable to changing technology and the changing nature of the labor market. It also requires a commitment to providing programs that are accessible and responsive to the needs of all students.
Post-Secondary Education in Conservation Technology

KINGSLY L. GREENE
Agricultural and Technical College
Morrisville, New York

New Curricula
In an effort to meet these challenges, the State University of New York Agricultural and Technical College (Morrisville, New York) initiated a new, two-year curriculum in Natural Resources Conservation, aimed at preparing a broadly-trained, semi-professional conservationist. Planning for the new curriculum began in 1964. The curriculum was initiated in the fall of 1966.

In three years the enrollment in everything and everyone within the program has grown from 45 to 140 with the number of faculty increasing from one to three and more projected as facilities are made available. Student interest runs high and many applicants are turned away due to staff and physical plant limitations. It is hoped that many more students can be accommodated in each graduating class.

The curriculum provides a challenging and stimulating experience for most students. As the accompanying list of courses indicates, considerable emphasis is placed on the basic physical and biological sciences along with a variety of professional courses in conservation subjects and related manual skills. There is also ample scope to improve communicative skills and a sequence in the social sciences to acquire and to acquaint students with social and cultural and social problems involved.

No attempt has been made to prepare specialists because a two-year curriculum can accommodate only so many credit hours and proliferation of courses will dilute the program as to render it ineffective. Actually the curriculum produces a very knowledgeable and concerned individual with a variety of skills and the capacity to bring all this to bear upon environmental problems. For many students doors to further education are opened. Forty to 50 percent of each graduating class transfer to four-year institutions.

Activities
The entire program is laboratory oriented. In courses such as forestry, park and recreation management, wildlife management, and soil and water conservation, students spend 50 to 60 percent of their laboratory time in the field. These experiences provide opportunities for students to grow to grips with actual environmental problems, use professional methods and equipment, and to gain field experience under a variety of conditions. Field work is carried out regardless of the weather and the group has developed an air of de corps based upon their common interests, knowledge, discipline and rugged experiences together.

Another dimension of the curriculum is provided through the Conservation Club which is involved in both conservation activities and campus social life. Some of the club members provide volunteer services to the elementary schools as resource persons in environmental and natural history type presentations. The club also serves as an orientation of awareness, true concern, and adequate education.

Man has misused his natural environment for so long that thoughtful and proper use may appear to cause hardship to some individuals. An awareness of the problems facing us today and in the future seems, however, to be spreading rapidly. Conservation has become a magic word. Unfortunately, we are not fully comprehending the magnitude or complexities of the problems involved. We are unable to establish priorities for appropriate action, and frankly, we cannot even agree upon what is meant by conservation. To some it implies wise use of resources; to others it means varying degrees of preservation. We must realize that it is our near-future capability of meeting the challenges that lie ahead. This can be done through education pertaining to the wise use and careful management of environment resources. Time is working against us. No one knows exactly what critical levels of pollution or acute shortages of resources will completely destroy life on earth. Man has created the problems and only man can solve them. The solutions will come through a sharpening of awareness, true concern, and adequate education.

Man has misused his natural environment for so long that thoughtful and proper use may appear to cause hardship to some individuals. An awareness of the problems facing us today and in the future seems, however, to be spreading rapidly. Conservation has become a magic word. Unfortunately, we are not fully comprehending the magnitude or complexities of the problems involved. We are unable to establish priorities for appropriate action, and frankly, we cannot even agree upon what is meant by conservation. To some it implies wise use of resources; to others it means varying degrees of preservation. We must realize that it is our near-future capability of meeting the challenges that lie ahead. This can be done through education pertaining to the wise use and careful management of environment resources. Time is working against us. No one knows exactly what critical levels of pollution or acute shortages of resources will completely destroy life on earth. Man has created the problems and only man can solve them. The solutions will come through a sharpening of awareness, true concern, and adequate education.

Kingsley L. Greene
is Associate Professor of Natural Resources Conservation, State University of New York, Agricultural and Technical College, Morrisville, New York.
A Specialized Program in Natural Resources

Davy DuRose, Skate College
Redding, California

After fifteen years of operation it became apparent that Shasta Junior College was not providing training for students at the technical level in the field of natural resources. Some inquiries pointed out that only about 6 to 10 percent of the students in the transfer programs in natural resources were actually transferring to a four-year college. A majority of the students were going to work without more than two years of schooling, and most were quitting without completing two years. From discussions with teachers, counselors, and students, it seemed that the courses required for transfer were too difficult. It also was found that the students dropping out were still going to work for resource agencies but at a low pay rate.

Systematic Study

Shasta College has two compelling reasons for instituting a vocational program in natural resources. First, we had become aware of a growing need if unspecified, job market for students with the kind of training provided in the natural resources program. And second, we have a large number of students with interests in the field of natural resources who educational needs were not met. Several organizations were invited to the College to discuss the program. School officials were aware that the information gained from the discussion was insufficient and that a more systematic study would have to be made. One of the major purposes of the study was to examine the relationship between the natural resources curriculum and the training needs of specific jobs. A second and related purpose of the study was to estimate the job placement potential of the College’s service area for graduates of the program.

A list of potential employers was compiled and they were interviewed along with one employee in each level of job entry.

The Program

A result of the six-month study the College developed a Natural Resources Program to meet the demands of both the students and employers. Courses in range management, surveying, forest practices, wildlife management, outdoor recreation, fish and wildlife management, wood processing, mechanics, logging, and water resources were developed.

Most of the courses have a three-hour laboratory to provide the necessary facilities and techniques required by employers. The entire program is planned for students who do not desire to transfer but want the necessary skills to secure and keep a job. Also, the English Department developed special classes in English, report writing, and group dynamics for students in the Natural Resources program.

The courses developed are designed for transfer to a four-year college. A distinction must be made between transfer and extension courses. The two types of programs should not be confused. They each have separate goals and objectives.

Facilities

Shasta College is situated among 310 acres of pine and oak which include a 75 acre irrigated farm and a 10 acre recreation area with picnic facilities. A two-mile nature trail is being constructed around the entire campus. A one-acre Christmas tree planting has been established and 2,000 trees are being planted. Full reforestation practices are carried out in a deep creek channel running through the campus. One area is being developed for upland grass habitats with grass and hardwood trees being planted.

The College also owns 500 acres of land range seven miles from campus which is being developed for livestock grazing and wildlife habitat. A gym has been developed, a gallinaceous gopher has been constructed, and a reservoir is being built. About seven acres have been converted from forest to grass, and seeding and fertility experiments have been established.

The Outlook

All of the work is done with equipment owned and maintained by students getting on-the-job training or students in regular classes. The program must be planned to meet the needs of both the business community and the local economy. It appears that there is a very definite need for this type of training. There is a growing need for the kind of training provided in the program.

Student Interest

Only 35 percent of the students indicate an interest in occupations in agricultural resources. Approximately one-third of the students indicated an interest in agricultural resources were interested in agriculture only, while one-third were interested in agricultural resources and agricultural mechanization.

The Agricultural Education Magazine

December, 1969

John A. Becker, University of Missouri

John R. Stitt, Southern Illinois University

This article is based on John A. Becker's M.S. thesis, "The Measurement of the Agricultural Resources Role with Respect to Southern Illinois Agricultural Education," which was completed at Southern Illinois University in 1968. Currently, Mr. Becker is a graduate student in agricultural economics at the University of Missouri. Dr. Stitt is Assistant Professor of Agricultural Education at Southern Illinois University.
Developing a Course of Instruction in Agricultural Resources

HOWARD L. DOWNER, Teacher Education University of Tennessee at Martin

The population of the United States is predicted to double by the year 2000. This increase in population will be reflected by a proportional increase in the demand for food and fiber, but it will result in a three-fold increase in the land needed for agricultural production. Therefore, a need exists for outdoor recreational activities. So we are faced, on the one hand, with a need to expand agricultural production and on the other with a need to divert acreage now in production to other demanding uses.

As the pattern of land use changes it will be imperative that the conservation, protection and regulation, and recreational use of natural resources be coordinated and expanded so that the natural resources needed for agricultural production, recreation, and aesthetic appreciation will not be depleted by one or more of these uses to the detriment of the others. Proper utilization of natural resources will require the employment of increasing numbers of persons who possess certain agricultural competencies and understandings.

Need for Instruction

Through the efforts of leaders in outdoor education, state departments of conservation, there has been a dramatic increase in the number of schools offering outdoor education in the elementary grades. Many students have developed a vocational interest in the activities of conservation, protection and regulation, and recreational utilization of natural resources. There is, however, little instruction in conservation and outdoor education at the secondary level.

Agricultural resources have been established as one of six instructional areas in vocational-technical education in agriculture by the U.S. Office of Education. Courses of study in agricultural resources at the secondary and post-secondary levels must be developed to meet the needs of students whose occupational objectives are concerned with conservation, protection and regulation, and recreational use of natural resources. These courses will enable interested students to gain the knowledge, skills, attitudes, and appreciation necessary for entry and advancement in occupations pertaining to agricultural resources.

Curriculum Guide

The findings of research conducted at the Pennsylvania State University were used to develop a guide for use by teachers in developing vocational-technical programs of occupational instruction in agricultural resources. Items pertaining to program establishment and instructional units were rated by persons employed in agricultural resources and education as to their importance in occupational education in agricultural resources. The guide was based on items rated as of significant importance for inclusion in an instructional program.

The guide includes recommendations for planning a course of study, a suggested list of occupational titles in one of the three major activity areas, agricultural resources, and a teaching schedule for a two-year instructional program that includes 62 units of instruction. These units are selected for the group that may not be familiar. The following definitions are given to describe the nature of instruction in agricultural resources.

Agricultural resource instruction is a combination of subject matter and planned learning experiences concerned with the principles and procedures involved in the preservation and improvement of natural resources such as air, forests, soils, water, fish, wildlife, fisheries, and wildlife. The instruction emphasizes the cooperation and coordination of agricultural resources as a part of the vocational-technical school program. On-the-job youth and adults may also be served by the program.

Agricultural resource instruction involves units in occupational programs, such as agriculture, horticulture, and floriculture, which are unrelated to agriculture. The resources include activities such as the development of management, maintenance, and maintenance of soil, water, forests, and other natural areas, aesthetic and functional sites and structures, and fish and wildlife. The program is designed to meet the needs of the student and the public.

Conservation includes activities related to the development, management, and maintenance of soil, water, forests, and other natural areas, aesthetic and functional sites and structures, and fish and wildlife. The program is designed to meet the needs of the student and the public.

The program is designed to meet the needs of the student and the public.

Recommendations

The following recommendations for planning a course of study includes:

1. The objective of occupational education in agricultural resources should be to develop competencies needed by students to enter and advance in occupations in agriculture. The competencies are best developed by learning experiences that will bring the student in contact with the resources activities associated with his chosen occupation.

2. A coordinated program of occupational experience supervised by both the teacher of agriculture and the cooperating employer is of vital importance to the student's acquisition of the competencies required for successful employment after completion of the program.

3. In order to give students a comprehensive background in agricultural resources, they should be encouraged to schedule agriculture in grades 9, 10, and 11 and biology, chemistry, and appropriate mathematics courses. Specialized instruction in agricultural resources should be offered students in grades 11 and 12.

4. Due to the small number of students in some high school programs, it is logical to include instruction in agricultural resources as a part of the vocational-technical school program. On-the-job youth and adults may also be served by the program.

5. A minimum of 30 per cent of the instructional time should be devoted to related occupational experiences.

6. Occupational experiences programs should be carried out during the summer months, between the eleventh and twelfth grades, and on an out-of-school basis during the twelfth grade. At least 100 hours of occupational experiences should be accomplished by each student prior to high school graduation.

Howard L. Downer

The Agricultural Education Magazine

Essentials in Planning Instructional Programs in Agricultural Resources

(Continued from page 143)

perspective, technical, and skilled and semiskilled. Employers reported a desirable job entry age of 21 years, but age requirements varied three years according to job responsibility. Wages were both salaried and hourly and were competitive to other jobs in Southern Illinois with equivalent training requirements. All jobs, except skilled and semiskilled, required a high school certificate for entry. Experience was the key factor in advancement. Job titles usually required skills and abilities in mechanics. Generally, employers reported no great difficulty in finding qualified personnel.

Implications

Agricultural occupational teachers in high schools should identify students interested in agricultural resources and provide supervised agricultural experience programs in agricultural resources. A combination agricultural resources and agricultural mechanization program should be taught to provide necessary knowledge and skills for job entry. An insufficient number of students and an insufficient employment base do not warrant a two year post-secondary agricultural resources program in and for Southern Illinois only. Junior colleges must look beyond their districts to justify agricultural resources programs.

The results and implications of the study are somewhat surprising in light of what appeared to be a very apparent need for occupational education in agricultural resources. This by no means reduces the enormous potential in Southern Illinois to serve as a conservation and recreation region, but it implies that large numbers of highly skilled, vocally trained agricultural resources personnel will not be needed.
Instruction in Agricultural Mechanics Needed for Agricultural Resources Occupations

DOUGLAS PATTISON, Teaching Assistant
University of Illinois

The emerging and expanding fields of agricultural education present new challenges and opportunities for agricultural educators. The preparation of potential employees for many occupations in agricultural resources is a logical responsibility of high school and post-secondary agricultural education programs. Although the type and number of occupational opportunities in agricultural resources vary widely from community to community, schools should be able to identify a definite need for occupational preparation in some areas of agricultural resources. Many existing programs of high school and post-secondary agricultural education can be modified to prepare students for employment in a variety of occupations in agricultural resources.

The Potential

To access the potential of agricultural education for providing vocational programs, interviews were conducted with agricultural employers in Illinois. The interviews were conducted with agricultural employers in the state in an effort to ascertain the personnel's concepts of vocational agricultural programs, their views of employment opportunities in agricultural resources, the utilities of programs in agricultural mechanics, and the utility of programs in agricultural resources which would be beneficial for employment opportunities for students. The interviews were conducted with agricultural employers in an effort to ascertain the personnel's concepts of vocational agricultural programs, their views of employment opportunities in agricultural resources, the utilities of programs in agricultural mechanics, and the utility of programs in agricultural resources which would be beneficial for employment opportunities for students.

The persons interviewed were favorable toward the idea of agricultural education providing vocational training for prospective employees in agricultural resources. Many employers felt that agricultural education could provide a foundation for students who wish to pursue careers in agricultural resources. The employers felt that agricultural education could provide a foundation for students who wish to pursue careers in agricultural resources.

The persons interviewed were favorable toward the idea of agricultural education providing vocational training for prospective employees in agricultural resources. Many employers felt that agricultural education could provide a foundation for students who wish to pursue careers in agricultural resources. The employers felt that agricultural education could provide a foundation for students who wish to pursue careers in agricultural resources.

Mechanical Skills

Many job titles were discussed covering the wide range of job specifications. The employers felt that the main mechanical skills required were a knowledge of the tools and equipment needed in agricultural resources. The employers felt that the main mechanical skills required were a knowledge of the tools and equipment needed in agricultural resources.

The list includes mechanical skills common to several occupations such as plumbing, electrical, and mechanical. The employers felt that the main mechanical skills required were a knowledge of the tools and equipment needed in agricultural resources. The employers felt that the main mechanical skills required were a knowledge of the tools and equipment needed in agricultural resources.

Conclusions

From the analysis of the interviews, the following conclusions are made:

Many employees in agricultural resources have received inadequate training. Most of their training has been conducted in small groups and in public classes. The majority of the employees in agricultural resources have received inadequate training. Most of their training has been conducted in small groups and in public classes.

The employees in agricultural resources are not highly specialized and would require little additional training in agricultural resources. The employees in agricultural resources are not highly specialized and would require little additional training in agricultural resources.

The employees are willing to help design and implement vocational programs to prepare prospective employees.

Most mechanical abilities needed by employees in agricultural resources are obtained in other occupations and can be justified in agricultural occupations courses.

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THE AGRICULTURAL EDUCATION MAGAZINE
Inservice Education in Recreational Planning and Campground Development

AUSTIN F. HAMER
State University College of Forestry
Syracuse University

Camp Oswegatchie, the FFA camp for New York State located in the western Adirondack Mountains of New York, was the site of an inservice workshop on Private and Public Campgrounds in New York held last summer for occupational education teachers. The one-week session was sponsored by the New York State Education Department's Bureau of Agricultural Education in collaboration with the State University College of Forestry at Syracuse University.

The workshop was designed to provide vocational agriculture and occupational education teachers with knowledge and skills in the field of recreational land-use planning and campground development, operation, and maintenance. The need for this kind of training has been expressed by teachers of conservation courses which include recreational units on outdoor recreation in addition to the usual units on forestry, soil, and water conservation, and wildlife management.

The Workshop Program

The workshop was proposed by Dr. Harold L. Nolte, Chief of the Bureau of Agricultural Education of the New York State Education Department. The tremendous increase in demand for recreation in the northeastern states which influences private land owners to develop recreational opportunities of many kinds was one factor justifying the need for the workshop. Also, public agencies are enlarging older facilities and constructing new facilities to handle the influx of families seeking fun and relaxation. These developments substantiate the need for inservice education for teachers who help prepare young men and women to satisfy the increasing demand for skilled workers and recreational land-planning technicians.

Professor Floyd E. Carlson of the State University College of Forestry was the principal instructor for the workshop. He was assisted by Professor Austin F. Hamer, Coordinator of Continuing Education of the College of Forestry. Assistance in conducting the workshop was obtained from professional landscape architects, a senior architect in the State Conservation Department, a forester of the Conservation Department's Division of Lands and Forests, a biologist of the U. S. Soil Conservation Service, a state park superintendent, and a park maintenance assistant from the State Park Commission.

The Workshop Topics

Topic studied and discussed during the workshop include the following:

—selection of an area for a campground
—recreational appraisal including a discussion of recreation enterprises on private lands and the potential development of recreational enterprises
—planning campground areas including roads and trails, water supply and sanitation facilities, utilities, campsites, location and spacing, and play areas
—operating procedures, staffing, leasing or rental policies, advertising, maintenance, and program development

Activities

Several teams of teachers investigated field problems on the 1,300-acre Oswegatchie property. Each team developed preliminary plans for specific areas. One problem was the development of a recreation area near the family-type campground and recreation area near the larger lake on the property. All plans were developed to provide students attending the camp with opportunities to learn about recreational land development and management. The big challenge for recreational land developers is to maintain unaltered natural areas and still provide for the intensive use that will be made of the land. Putting together by teams of teachers were presented to the entire group for critique. Land clearing, fill, drainage, surface treatments, roads, vistas, and signs were thoroughly discussed as well as the location and construction of service buildings.

One day was devoted to a field trip to view selected private and public campgrounds. Visitors were made to small privately owned areas and state parks with facilities to accommodate them. Oswegatchie is a good example of the group established on the basis of essential criteria.

The Outcome

By the end of the workshop, most of the teachers had found their definitions of what was desirable in terms of site, facilities, operating procedures, and staffing. They began to think in terms of the knowledge and skills needed by any private developer of recreational land, and how to recognize some of the opportunities for employment in state and federal agencies.

What may be seen is how this type of inservice education course could be prepared by employment in occupational course development.

The workshop was conducted by an instructor in outdoor recreation and wildlife technology. This was the first such course ever offered in the state, and the students were able to apply what they learned to real-life situations.

In September 1969, the new Tri-County Technical Institute at Newlon, Ohio, became the first technical institute in Ohio to offer a two-year program in Recreation and Wildlife Technology. This took about through the combined efforts of many individuals who saw the need for well-trained technicians in these fields.

Tri-County Technical Institute is jointly located for the program. If any location in the state offers such a wealth of nearby public facilities, there are several state parks, state forests, and state wildlife areas within a few hours drive from the school. Parks of Wayne National Forest, including some recreation sites, and the Tamarack Creek District are nearby. Students can observe first hand the facilities and objectives of state agencies. Also available for field trips are study purposes are thousands of acres of land owned by a coal company.

The curriculum

The instructional program in recreation and wildlife technology is designed to prepare students to be park managers, wildlife area managers, natural resource workers, and technicians in outdoor recreation and wildlife areas. The program involves outdoor work and requires extensive field trips in ecology and wildlife technology as well as basic instruction in general management skills.

The curriculum is divided into six quarters that span a two year period. Each quarter has twenty-five hours of classroom study and laboratory work per week. Upon successful completion of the program the student receives an Associate Degree.

Students receive one year of maintenance and management courses which include on-the-job training. They learn the complete operation of a state park including cleaning latrines, painting, operation of equipment, maintenance of tools and equipment, maintenance of water and sewage systems, office procedures, preparation of budgets and work schedules, and rules and regulations.

Three wildlife courses include practical experience in game management at nearby state wildlife areas. Students learn to operate machinery used in game management. The techniques of game management are studied and practiced while in the classroom. A wide variety of courses in botany, zoology, and soil management are also available.

The recreation and wildlife technician is in almost constant contact with people who ask questions about birds, trees, rocks, flowers, and the like. Students learn to identify and interpret the scheme of nature. They learn how to conduct field trips with students, teachers, and the general public.

To provide the necessary background for the course, the instructors have begun to develop a course in the field and are in the process of developing a course in aquatic communities. The course is designed to give instructors and students a basic understanding of the aquatic environment and its inhabitants.

Field Trips

Field trips are an important part of the instructional program in Recreation and Wildlife Technology at Tri-County Technical Institute. In this way students are exposed to a real-world setting for on-the-job training.

Curriculum

The curriculum has been designed to provide students with a variety of basic and general courses to reinforce the technical skills. Two quarters of mathematics including algebra and trigonometry provide the necessary background for a surveying course. Three quarters of communications are an integral part of the program and consist almost exclusively of writing and speaking. Writing projects include research reports, technical reports, letters, and memos. Communications is especially important to recreation and wildlife technicians.

A variety of other courses complete the two-year program. A course in recreation covers the public and private agencies that deal with recreation resources. Science courses are botany, zoology, and soil management. Anthropology and history, as they pertain to Ohio, will make the final location of graduates more meaningful.

Economics and personnel management relate to recreation problems where applicable. Several courses that students in recreation and wildlife take are also taken.

(Continued on page 151)
AGRICULTURAL RECREATION: A New Challenge for Vocational Agriculture

THOMAS L. BOWLES, Director of Agriculture
Round Valley High School
Covelo, California

There is a need for persons who have understandings and skills dealing with the broad field of natural resources. To help meet this need, a program in Natural Resources Management and Agricultural Recreation has been established at Round Valley High School, Covelo, California. The program leads both to profitable enterprises for students and to full-time employment.

The Trend

The trend toward agriculture recreation started as a result of the leisure status and the affluence. This new influence on agriculture has several dimensions. It began with a few city farmers as the trend week in the country helping with the chores and picking fresh fruits and vegetables. It is now a nation wide with gophers clubs, duck and pheasant clubs, and campsites the large corporation-type recreation facilities for such services as one 2,000 acre cattle ranch in California that is divided into 18,000 lots for vacation homes.

Why the growing interest in recreation areas? There is an increasing recognition of the economic value of natural resources due to a growing popularity of outdoor activities. Improved highway systems, overcrowded state and national forests and parks, and the congestion and air pollution in metropolitan areas. The result is a demand for outdoor recreation facilities and proper management of recreation areas. This, in turn, results in the urgent need for educational programs to prepare persons who can evaluate, develop, and put rural areas to practical and economical use for recreation purposes.

Opportunities for Students

What does all this mean for high school agriculture students? Many farms and ranches are already marginal with increased production costs, taxes, and inflated land prices which discourage expansion. So the question of developing recreation enterprises on a farm should be considered. What, then, are the opportunities?

For students who have a family operation, recreation enterprises offer opportunities for additional income. One vocational agriculture student at Round Valley High School charges gun club members $6.00 to dress a deer on the 30,000 acre ranch his father manages. He also guides jeep rides, trap hunts, saddle horses, and leads trail rides. He does this in addition to farming activities, helping with the hay, grain, and cattle operations, and assisting with a 500-head commercial cow herd. Another student breeds and trains horses, cuts firewood for campers, and uses his tractor which is normally used in hay farming and on garden plots to grade out campsites.

Another vocational agriculture student spent part of the summer trapping some 600 feral hogs in the rit- tains. Many of the hogs will be bred to European boars to produce hogs. The feral hogs were hunted the first year by hunters from as far away as Las Angeles with the student employed as a trail guide. A bill of 300 pigs sold for $125 each is an income which parallels a large cattle or grain operation. Another enterprise for ranching is hunting wild game. As many as 40 have been imported from Texas for hunters who will pay $125 for each game killed.

Instruction

What about classroom instruction and projects in vocational agriculture programs pertaining to agriculture recreation? Vocational agriculture programs provide for care and operation in recreation resources through existing courses in forestry, wild life management, soil conservation, and business hospitality. Courses can be expanded to include pleasure horse production, game ranch management, campsite development and management, and national parks, environmental control, and rural landscape design.

The agriculture mechanics program which provides instruction in camp equipment, plumbing, welding, and operation and maintenance of tractors and tractors can be expanded to include other mechanical skills appropriate to agriculture recreation. Supervised occupational experiences could include wildlife projects such as raising pheasants, quail, and wild hogs and even projects such as raising pheasants and feeding them to turkey and rabbits. A 600- acre duck farm at California's Sacramento Valley.

The FFA program offers many activities helpful in an agriculture recreation program. For example, the Round Valley High FFA Chapter stages a field day as a part of the agriculture recreation program that attracts people from throughout northern California.

Establishing Recreation Enterprises

What is involved in establishing an enterprise in recreational and resource management? First, most farms and ranches have the necessary resources which include open space, free from neon signs and telephone wires, and views of open meadows with grazing stock. Water is most important whether it is an open running spring, a small duck pond, or a lake. Then, brush growth and hilly ground are important; wildlife and a variety of livestock are essential.

Accessible roads are a necessity as well as sanitation and shower facilities. One cattle ranch in Califonia charges $6.00 a day for trailers and $4.00 a day to pitch a tent. Recreationalists are willing to pay for quality if it can be delivered.

Next you need to ask whether you have the right attitude. You are going to have to tell a person from the city to keep the gate closed more than once. You need a basic understanding of human behavior. You should know if a ready market is available which includes research on population and competition from other recreational resources. The basic skills for repairing facilities are quite important as are the skills for managing for recreational facilities is becoming more and more available; however, it still is a high risk business. Very necessary is information on liability insurance and state and county ordinances. Also, the effect of the recreational enterprise on the farm and its ranch operation must be considered. Will they get in the way during the rush season?

A New Program in Recreation and Wildlife Technology (Continued from page 149)

by students in the Forestry Technology curriculum also offered at Tri County Technical Institute. These courses include control, introduction to forestry, and wildlife.

Students and Staff

This is only the second year of operation for the program, there have been no graduates. The first year, 1965-66, forty-two students enrolled in recreation and wildlife technology. Twenty-three students returned for the second year. Of those who did no re- sign, several went into the military service, some took jobs, and a few

found the program not to the liking. Several students left because they would not or could not do the required homework.

In the fall of 1965-66, fifty-one students enrolled in the recreation and wildlife program. They are divided into three sections to keep the classes as small as possible. During the 1969 summer ten students were employed in park and wildlife work, and several more could have had summer jobs.

We think that this technical program will prove to be successful and will improve the quality of the technicians employed in recreation and wildlife work. It is not a complete program; but it will change with the times. We are always seeking improvements to graduate a better prepared technician.
Diversified Experience Programs in Vocational Agriculture

HAROLD RINKLEY, Teacher Education University of Kentucky

Experience programs are the foundation stones of the instructional programs in vocational agriculture. Experience programs are at the center of the battle, not a skirmish on the fringe. The test of the 70's is wrapped up in how deeply these in the profession believe in experience programs for students.

Students. All students have diversified farming programs—diversified experience programs in production agriculture. In each department, students have a range from students having one project to students having farming programs consisting of cash crops, livestock, and feed crops. In a sense, diversified experience programs in production agriculture have been on the scene for a long time.

A Possibility

Are diversified experience programs in off-farm agricultural occupations a reasonable possibility? For several years now teachers of agriculture have provided programs in off-farm agricultural occupations in specialized areas such as horticulture, agricultural mechanics, and sales and service. Many teachers have experienced difficulties in developing enough training stations for all students to have experience programs in one of these special areas.

The question is: Can an instructional program be developed in which the experience programs of students are diversified, that is, programs which provide training in agriculture (class instruction and supervised experience) for students placed in several types and kinds of agricultural businesses, industries, and agencies? The answer is "yes" with qualifications and limitations. Because labor laws limit the age for working students, the placement for experience programs will be limited for the most part to junior and senior students. In most cases, these students who are seniors. There are possibilities for starting experience programs with second-year junior students who are continuing in the senior year. This set-up provides an excellent opportunity to place students for a large part of their experience programs during the summer months between the junior and senior years.

Teachers are aware of the difficulties in providing group instruction in the classroom when students' experience programs are diversified. Teachers cannot deal in depth with a number of diversified experience programs. Teachers know better than to "try before the class" the individual problem of each student related to a different experience program. So the question: What can be done? To summarize: it is easy; the practice is more difficult.

An Approach

The first step is to determine the common competencies needed by students regardless of the diversity of their programs. Focus on this, the teacher can determine the units of instruction common to the group and objectives for each unit of instruction might look something like this:

Opportunities in Agricultural Occupations

Orientation to the Training Program

Organizational Agriculture Businesses

Agricultural Mechanics

Agricultural Relations and Personality Traits

Store Skills

Salesmanship and Selling

These units would be abbreviated and several of the units might be 60 to 70 percent of the class structure time for group work. But how can teachers plan for and make effective use of the other 20 to 30 percent of the class time? Let's look at an individual student to meet the needs of students unique to their experience programs. The diversified instructional guide can be developed which the teacher can develop individual student-study guides based on the individual experience programs.

Diversified Experience Programs

Suggest a teacher has 16 students in a senior class of which each student is engaged in diversified experience programs in the following areas: farming, garden center employee, agricultural machinery buyer, horticultural sales and service, veterinary aide, forestry aide, and meat cutter.

The teacher cannot be expected to make effective use of individual-study days unless the teacher provides guidance. The following study guide was prepared and used in one of the diversified instructional guide related to their individual experience programs. If teachers had an experience program in mind, the following study guide plan illustrated below for student interested in forestry and similar guides and training plans for all the other students, how helpful would this be to students and teachers in providing a diversified program in off-farm agricultural occupations?

Individual Student-Study Guide

Number: Forestry Aide

Learning Objectives:

To develop the knowledge and understanding of:

1. Lumber obtained from the community
2. Selecting species for different types of lumber
3. Wood and use in furniture
4. Tree care
5. Forest control
6. Soil science

Learning Materials:


Questions:

1. What is the value of lumber?
2. What is the role of the forest in the economy?
3. What are the different types of wood used in furniture?
4. What is the importance of tree care?
5. Why is forest control important?
6. What is the role of soil science in forestry?

The teacher can use this study guide by working through each lesson carefully and thoroughly.

Learning No. 1: Understanding the Importance of Forestry in the Local, State, and National Economy.

Content:

1. The role of the forest in providing raw materials
2. The importance of forest products in the economy
3. The relationship of forest products to other industries

Problem:

1. How can the teacher help students understand the importance of forestry in the local, state, and national economy?
2. What specific steps can be taken to promote forestry?

References:


This student's experience program as a forestry aide would be included in a training plan for each student placed for an experience program as a forestry aide.

Training Plan

The following jobs are appropriate to include in a training plan for each student placed for an experience program as a forestry aide:

1. Care for trees until started
2. Care for trees planted
3. Weed trees
4. Gather data on trees
5. Record data on growth
6. Keep records of timber growth
7. Keep field notes
8. Prepare reports
9. Analyze data
10. Interpret data

These jobs can be accomplished in class by solving problems in the situations contained in this study guide. Each learning situation (shown) is a part of the training plan on a separate page. The following suggestions are made to help you in working through each lesson:

1. Read the material carefully.
2. State the problem-performance.
3. Read the content material to help you analyze the problem.
4. Check with the teacher your problem statement and approval of the plan suggested in the Note book.
5. Study the suggested and other references.
6. Actively solve the problem (can I take the conclusion and do the job if I do it with a skill?)
7. Write the conclusion in the Notebook.

Remember, you will learn more from this study guide by working through each lesson carefully and thoroughly.
Initiating an Agricultural Resources Program

DEAN McNEILY
San Joaquin Delta College
Stockton, California

California junior colleges serve three major functions: preparing students for vocational-technical jobs after two years of formal training; offering lower division courses for students who plan to transfer to four-year colleges; and providing general education courses for adults and others who are interested. San Joaquin County is the fifth leading agricultural county in the United States. It has a large agricultural community and serves an area with 1,000 miles of Delta waterways on the west to the high Sierras on the east. Jobs are sometimes abundant in agriculture, recreation, and natural resource development and management. In addition, there is need for well-structured courses in conservation and related problems for the general public.

Program Development

An advisory committee with members from all fields of farming, business, business, and recreational interests has been used to guide the development of our courses and programs. The advisory committee is supplemented by ad hoc committees of individuals directly involved in the specific fields to help develop specified courses. In addition to making the courses more meaningful and relevant, these advisers often serve as guest lecturers or provide resources for laboratory experiences.

Since San Joaquin Delta College is located in an area rich in natural and recreational resources, the College embarked on a program of expansion in this field. A strong agricultural program developed when the College was formed in 1963. In 1966, we started working with the Bureau of Land Management to acquire a parcel of land in the Sierras. We have since acquired 40 acres of timber land in Calaveras County, located approximately 40 miles from the College but in the service area of our district.

Program Expansion

In the fall of 1967, we requested the services of Howard Sidney, a consultant for the National Academy of Science's Commission on Education in Agriculture and Natural Resources. Mr. Sidney recommended that the College's Agricultural Department should be made a Division of Agriculture and Natural Resources and that the College should expand the curriculum in natural resources. We started a forestry course in 1966 and a course in conservation of natural resources in 1967.

Curriculum expansion, development of courses, hiring of additional staff, and development of our forest property have been based on need as seen by our staff, the advisory committee, and recommendations of staff members of the State Division of Beaches and Parks, State Department of Forestry, State Fish and Game Department and the U. S. Forest Service. Additional data have come from publications of the U. S. Office of Education and studies conducted at Shasta College in Redding, California, and Modesto Junior College, Modesto, California.

New Courses

We have added a full-time and part-time instructor in the division of Agriculture and Natural Resources. We now have nine full-time and part-time instructors in the division, plus one counselor who directs his efforts to the division. In 1967, we have courses in Introduction to Forestry, Conservation of Natural Resources (over 100 students are currently enrolled in two sections), Natural Resources Development and Management, and a course in Park System and Management.

A Natural Resource Field Course has been approved in which students will travel to study the recreations and natural resources in California during summer vacation. At the present time, the natural resource instructors are working with the State Department of Fish and Game and with various local game farms in the development of a Wildlife Production and Management course.

In developing new courses and programs, we consider the objective of the college, the needs of students, and job opportunities in the area. Not all courses are developed using the program that is available. We are developing courses to develop the help of professionals, technicians, and field workers to find out what courses should exist and what their formation and students will need in the future. An instructional program was developed along these lines, supplemented with as much practical laboratory experience as possible and guided by the field. The need for students to prepare students in entry into jobs in the resources field.

Use Local Facilities in Teaching Conservation

A advisory committee of students at Salem, New York, learns to use a mowing tools in a timber and land improvement project.

HARRY KARMAK
Founder of Agriculture
Salem, New York

During the past year vocational agriculture students at Washington Academy, Salem, New York, indicated an interest in learning more about the conservation of natural resources. They requested that the traditional course of study in agriculture be modified to include additional units of instruction on conserva- tion.

Planning

A series of meetings was held with the Agricultural Advisory Board, school administrators and guidance counselors, and other resource people who could help develop and implement the objectives of our modified courses of study. The following objectives were developed for the revised courses of study:

-To allow students in grades 9 through 12 to develop a greater appreciation of our natural resources.

-To give students the opportunity to develop some of the skills needed for employment in the various areas of conservation.

-To expose students to the various aspects of opportunities in the broad field of conservation.

-To meet the varied needs of students, including students with special needs and the handicapped.

-To motivate students so that they will continue school and post-high school requirements.

-To introduce non-traditional methods of instruction for students with behavioral problems.

-Courses of study were developed to include units of instruction in the following areas: soil and water management; forestry equipment and tools; heavy equipment; and surveying.

-Local resources were used to implement the revised courses of study. The Merck Forest Foundation consists of 2,600 acres of land in Rupert, Vermont, which is located twelve miles from the school. The Foundation allows us to use this facility as a land laboratory. The Foundation provided a forestry consultant from the New England Forestry Foundation and a key advisor from the Merck Forest Foundation. These two men work closely with our students in the field. The Foundation supplied all of the small tools and heavy equipment needed for effective instruction. A variety of equipment including chain saws, pruner equipment, transit, and bulldozers were provided. Using these facilities and equipment, students conducted a complete pulping operation during the spring and summer months.

A private landowner in the area leased land adjacent to the school for a land laboratory. We were able to borrow equipment from our area's occupation center and conduct units in study in this area which is within walking distance of the school. We have been contacted by several individuals in the school district regarding additional equipment. We are making a list of offers from these people to keep on file for future use.

Resources Are Available

There are many resources available that can be utilized to teach effective- ly units of instruction in conservation education in and around local school districts. Students like working in the field and indicate a desire to continue to study conservation using land lab- oratory facilities.

We have been fortunate in receiving excellent cooperation from the Board of Education, administrators, and fac- ulty members in arranging schedules and transportation so that students could spend a double 45-minute period in the field. A special summer program allowed us to take a group of inter- ested students for several days to work with heavy equipment at the Merck Foundation land laboratory.

It has been our experience that fac- ulty members are available locally to teach new courses that require land labora- tory facilities. Teachers of agriculture should explore local resources to help implement new courses of study that will prepare students to meet the needs of students in vocational agriculture to meet better the needs of students.
SUMMARIES OF STUDIES IN AGRICULTURAL EDUCATION 1963-1965. Compiled and Edited by Research Committee, Agricultural Education Division, American Vocational Association. Danville, Illinois: The Interstate Printers and Publishers, 1966, 138 pp., $1.00. To order: University of Vermont, 1100 Forestry and Agriculture. This book is intended for those interested in agricultural education but it would be helpful for any teacher of agriculture who wishes to expand his knowledge of the subject. The book is well organized and easy to read. It is a valuable resource for anyone interested in agricultural education.

YOUR ATTITUDE IS CHANGING by E. D. Chapman. Chicago, Illinois: Science Research Associates, 1963, 217 pp., $1.25. This book is intended for students in grades 8 and 9. It is a useful tool for helping students to understand the importance of attitude in their lives. The book is well written and provides practical advice for improving students' attitudes.

PLANT SCIENCE by Jules Janick, Robert W. Scherker, Frank W. Woods and Vernon W. Ruttan, San Francisco, California: W. H. Freeman and Company, 1969, 629 pp., $12.00. This book is intended for students in grades 9 and 10. It is a comprehensive text that covers the basic principles of plant science. The book is well organized and provides clear explanations that are easy to understand. It is a valuable resource for anyone interested in plant science.
Technical Education in Ornamental Horticulture

JAMES E. FITTS
James Connally Technical Institute
Waco, Texas

The changing social structure has shown the necessity for a change in agricultural education in high schools and colleges. The increasing importance of ornamental horticulture and the need for skilled workers in ornamental horticulture illustrate a major change occurring in agricultural education today.

The nursery industry is an ever-increasing agricultural business. As the nursery industry continues to grow, there will be an increasing need for properly prepared personnel for the industry. The floral industry is faced with a decline in employees trained in floral skills.

Technical Education

Due to the increasing needs for specialized persons in the nursery and floral industries, the newly formed James Connally Technical Institute was asked to develop a program in horticulture and ornamental horticulture technology. James Connally Technical Institute was created by act of the Texas Legislature in 1965. The act authorized the Board of Directors of Texas A&M University to establish an institution which offers courses of study in vocational and technical education for which there is a demand within the state.

The deactivate of James Connally Air Force Base near Waco, Texas, provided excellent facilities for developing a variety of technical education programs. The results to date provide convincing evidence to support legislative action to appropriate funds to purchase the entire air base, including housing, buildings, runways, hangars, and auxiliary facilities. This action established James Connally Technical Institute as an educational institution within the state's educational system with a distinctive and unique role.

The Program

The two-year course in floriculture and ornamental horticulture began in September 1968. These courses were established on the recommendations of nurserymen, florists, and landscape men. The demand for workers in these fields far exceeded the number available for employment. A state advisory committee was formed to assist in determining the content and objectives of the curriculum.

The program in ornamental horticulture includes a two-year curriculum covering both nursery and floral courses. Courses are offered in plant propagation and identification, floral and landscape design, indoor landscaping, greenhouse management, nursery and garden center management, flower shop management, nursery plant production, plant insects and diseases, flower crop production, landscape plants, and materials, and horticultural and floricultural equipment.

Placement training is a required part of the program. Greenhouse operators and nursery and garden center managers cooperate in providing this training. Students are paid during this phase of their training by employers.

The instructor works with the students and employers in supervising the training.

Facilities

The 2,200 acre campus contains over 100 buildings for instructional purposes which house air-conditioned classrooms, laboratories, shops, and a library. There are dining facilities, athletic facilities, recreation facilities, student center and a chapel on campus.

Alpha Gamma Rho Scholarship

The Educational Foundation of Alpha Gamma Rho offers an annual scholarship of $300 toward a full-time course at any accredited college or university for one vocational agricultural student. Each State Association of Agricultural Education is entitled to the privilege of nominating one student annually for the scholarship. The official entry form is available from the NVATA, Box 4498, Lincoln, Nebraska 68504 or The Educational Foundation of Alpha Gamma Rho, 523 Cornell Avenue, Des Plaines, Illinois 60016. Entries due are due at the NVATA office no later than July 1 of each year.

The winner of the 1969 scholarship was Jilly B. Bellamy of Lyle, Washington. David Kohlhauf of Reinsel, Indiana was the first alternate and Donald Ernest of Delmarvan, Ohio was the second alternate. Applications were received from the following states: Arizona, Nevada, Utah, Washington, Kansas, Nebraska, Minnesota, South Carolina, New Hampshire, New York, Vermont, and West Virginia.

NVATA-USOE Committee Reports No Progress

"It appears that all efforts have fallen upon deaf ears in the Office of Education," states Dr. James Durkee, Chairman of the NVATA-USOE Committee. The latest of several meetings was held in Washington during the past year on September 15. Dr. James Aller, U.S. Commissioner of Education, had asked Dr. Grant Vevers to invite the Committee to meet with officials of the Bureau of Vocational Education. Dr. Aller did not attend the meeting.

In addition to Dr. Durkee the Committee members present were Bill Smith, President of NVATA; T.L. Faulkner, President of NASAE; Alfred Krueger, Past President of AATRA; and Don McDowell, Executive Director, National FFA Foundation Board. The U.S. Office was represented by Dr. Vevers, Associate Commissioner of Educational Administration; Dr. Leon Minear, Director of Vocational and Technical Education; Neville Hunsicker, FFA National Advisor; and William Paul Gray, FFA National Executive Secretary.

According to Dr. Vevers, his hands seem to be tied by shortages of personnel, the business analyst, the Bureau of the Budget, and the Secretary within the Department of Health, Education, and Welfare. The solution that he suggested to the committee, that legislation to provide funds for the staffing and operation of the Bureau of Vocational Education, does not appear to be a logical answer to an administrative problem. Dr. Vevers has evidently forgotten that he lobbied at a meeting with the committee on June 30 that organizational changes would not be made even though an increase in staff occurred. Granting that the present staff is inadequate, it is good common sense that two men who are devoting half-time to agricultural education should report to separate heads within the Division.

The Committee is presently giving thoughtful consideration to new avenues of appeal, including the possibility of asking Congress for special legislation for vocational agricultural education.
Stories in Pictures
ROBERT W. WALKER
University of Illinois

Four individuals from Minnesota were among the Honorary American FFA Degree recipients at the 1966 National FFA Convention. From left to right: Janice L. Clark, U.S. Office of Education, Washington, D.C.; C. A. Anderson, retired state and county of Lincoln, Minnesota; Emery Knox, Vocational Agriculture Teacher at S. E. Iowa, Minnesota; and Leo L. Knell, a former vocational agriculture teacher and present member in Minnesota and retired Head of Agriculture Education at Montana State University, who now resides in Seal Beach, California.

Public Health vocational agriculture students prepare for an airplane ride and aerial view of their home and school farm as a part of their study of soil and water conservation. (Photo by Ned Shemp)

Vocational agriculture students in Stone County, Mississippi, have placed safety signs at strategic locations in the community. This sign on tractor safety is located on the school grounds near a public highway.

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Tractor Safety in FFA

1. Keep all shields and guards in place.
2. Operate operator only on tractor or tractor-owned equipment.
3. Operate tractor and machinery appropriate to working conditions.
4. Keep fire extinguisher handy and ready for use.
5. Use caution and slow speed when making turns or abnormal maneuvers.
6. Use the tractor for only those jobs for which it was designed.
7. Operate the tractor at slower speed in tall weeds or grass.
8. Set brakes in lowest position when hitching to a heavy load.
9. Never put on or remove a belt while the pulley is in motion; lower all equipment before dismounting from the tractor.