Stories in Pictures

ROBERT W. WALKER
University of Illinois

A part of Minnesota's 20,028 dairy dairlings that were shipped from the Max McGee Wildlife Foundation are shown with a Northwest Airlines stewardess and FFA deck ronin from Long Prairie, Minnesota. (Photo by W. J. Koteromb)

Vocational agriculture teachers cited by the Pfizer Agricultural Division during the NVATA Convention in Boston for outstanding service to the FFA are (left to right) Victor Winnick, Stur, Minnesota; Cecil M. Grum, Jr., South, Alabama; and Dean Presse, accepting awards for Roy R. Knudsen and Malcom Halls, Stur, Montana. [P. M. Hendrickson (right), Vice President-General Manager of the Pfizer Agricultural Division, made the presentations. (Chas. Pfizer and Company, Inc. photo)]

Featuring —
GENERAL AND PRACTICAL ARTS EDUCATION IN AGRICULTURE
TABLE OF CONTENTS

Editorials

For all intents and purposes, we in agricultural education ignore, if not purposely discourage, the teaching of agriculture as a general or practical art subject in the public schools. Two notable exceptions are the school gardening program in Cleveland and the Los Angeles general education program for elementary and junior high school students reported in this issue. Most of us, however, equate public school agricultural education with the term "vocational and technical education." This point of view accentuates the role of agricultural education in occupational preparation and advancement. At the same time it minimizes the general education function which instruction in agriculture can and should serve.

Perhaps our lack of concern for general and practical agricultural art education can be explained, at least in part, when viewed in historical perspective. The Bureau of Education, in a study of agricultural instruction in public high schools in the United States in 1915-16, found that only one-fourth of the schools offered agricultural instruction for vocational purposes. Three-fourths of the schools reported that agriculture was taught primarily for informational and cultural purposes. But the enactment of the Smith-Hughes Act accentuated a continuing swing of the pendulum toward agricultural instruction primarily for vocational purposes, resulting in less and less emphasis on the study of agriculture as a part of general education. This shift in emphasis was applauded by the Federal Board for Vocational Education when in their annual report issued in 1922 they said, "agriculture as an informational subject or as a subject for general cultural purposes has almost entirely disappeared from the curriculum .. ."

The perspective is quite clear: special federal and state subsidies for vocational education have been a major factor in changing, and in a sense narrowing, the concept of public school education in agriculture to education principally for occupational purposes. The narrowing of the

(Continued on next page)

Guest Editorial...

General and Practical Arts Education in Agriculture

All good teachers of vocational agriculture make worthy contributions to the general and practical arts interests of students. Our teaching objectives are based upon two types of concept: the "whole-child" development of each individual, and subject mastery and skills development necessary for vocational success. Electricity learned in the farm shop might be used in a vocation, as a hobby, or as a basis of greater comprehension of the ever-changing world. The nature of the application or the dominant purpose of the learner is the distinguishing characteristic.

Vocational educators, as well as all educators, have been guilty of overcommitment to definitions that were too narrow. This has tended to suppress flexibility, imagination, vision, creativity, relevance, cooperation, and ready-contact with reality. All are key concepts in keeping vocational agriculture adjusted to a dynamic world. To improve this situation is the challenge of vocational education today.

Vocational agriculture cannot afford to insist on a narrow scope of service in the face of trends indicated by these terms currently in use: career development; pre-vocational; basic vocational; programs for persons with special needs; using vocational education as a vehicle (motivation, concreteness, relevance); educating the disadvantaged; life sciences; earth sciences; home teaching; vocational maturity; adult basic education; and agricultural education for anyone who wants it.

No one can claim a liberal education who does not have some understanding of the breadth of field of agriculture. It involves the application of the sciences, economics, mechanical skills, and many other disciplines to at least five hundred occupations and the way of life they imply. The importance of agriculture to any society must be kept fresh in the minds of the people. Those who provide the services of agriculture to the public must see to it that

(Continued on next page)
From the Editor... 

Purpose of agricultural education to vocational proficiency was accomplished by the preparation of agriculture as an appropriate subject for study only in rural schools. So during a period when nonrural groups were increasing rapidly in the population, instruction in agriculture was not available generally to those for whom general and practical arts agricultural education is very appropriate.

So what are the prospects for public school instruction in agriculture for nonrural, avocational, or general education purposes? An encouraging note is the current trend toward vocational education which emphasizes occupational orientation and exploration. Since these educational programs are frequently conducted under the aegis of vocational education, adequate opportunities exist for agricultural educators to develop innovative instructional programs designed to acquaint many students with agricultural and the occupational opportunities therein.

The potential for general and practical arts education in agriculture will not be realized if instruction is limited to programs and activities confined to be part of vocational education. Much of what most elementary and secondary students learn about agriculture is taught in or as an adjunct to general education subjects. There is little reason to believe that this approach to agricultural instruction for many students will change. Herein lies unlimited opportunities for providing instruction in agriculture for general, nonrural, and avocational purposes.

Teachers of agriculture, supervisors, and teacher educators have limited experience in providing general and practical arts education in or in consultation about or planning the study of agriculture through general education courses. But agricultural educators hold the key to whether general and practical arts education in agriculture will become a significant part of public school education.

History indicates that leadership for developing this phase of agricultural education will not be forthcoming from federal and state officials whose primary concern is federally-aided vocational and technical education. If general and practical arts education in agriculture is to develop and expand, it appears that teachers of agriculture must promote and develop these programs in cooperation with teachers of agriculture in local schools in both rural and urban areas. Teacher educators also have a challenge in redesigning programs to prepare present and prospective teachers for this new role in agricultural education. The development of innovative programs of general and practical arts education in agriculture will be a bold new venture, both in commitment and action, for all of us.—IRW

THE COVER PICTURE
Students studying unusual horticulture of Skibrow (Michigan) High School are taught by Ralph Beanbom, teacher of ornamental horticulture, in the development of a leadership program. Medical landscape planning provides experience at a home away from home. Photo by James Popo, Maryland Department of Education

THE AGRICULTURAL EDUCATION MAGAZINE

Guest Editorial... 

Those receiving the benefits understand and support it. This calls for the teaching of agriculture to many who will not earn a living directly from it. However, most people do make use of the arts and sciences taught in agriculture in some meaningful endeavors from part-time vocations to hobbies and in meeting the problems of everyday living. Vocational agriculture has changed greatly during the past decade. As we enter a new decade it must be even more sensitive to the changing society it is helping to create. To do this, it must have flexibility. Definitions, legal and social structures, and emotional loyalties must not contribute to further cultural lag.

Many educators are advocating some vocational education and work experience for everyone. The nature of agriculture makes it ideal for general and practical arts purposes. As educators, we should be anxious to teach our discipline to anyone who wants it. If we do not, someone else will.

Themes for Future Issues

June Evaluation in Agricultural Education

July Agricultural Education in Post-Secondary Schools

August Adult Education in Agriculture

September FFA: Past—Present—Future

October Ideas for Effective Teaching

November Research in Agricultural Education

December Innovations in Agricultural Education

In Los Angeles—

Agricultural Education for Elementary and Junior High School Students

IAN L. WILSON
Los Angeles (California) City Unified School District

ELEMENTARY SCHOOLS

The agricultural education program in Los Angeles' elementary schools is concerned with educating boys and girls to live in a world which is both agricultural and industrial. An agricultural-science program that has continuity of purpose, principles, and learning experiences is provided beginning in kindergarten and extending through grade six. The elementary agricultural education program emphasizes the resources in man's environment and the ways in which man has cultivated and changed resources to increase their value to him.

Agriculture-Science Centers:

The agricultural education program in the elementary schools may be divided into three broad areas: the school program, the Agriculture-Science Centers, and the mobile units. Nine elementary Agriculture-Science Centers are located throughout the school district. These centers are an integral part of the total program and their primary purpose is to help implement the agricultural and conservation-environmental educational programs through these activities.

—Providing instruction for pupils.

—Conducting the center to participate actively in scientific inquiry, observe demonstration lessons, and pursue new agricultural and conservation areas through the use of follow-up activities in the classroom.

—Serving as resource centers. In-service projects and teacher workshops are conducted at the centers. Teachers may also use the display pupils' work.

—Supplying agricultural materials for investigation. Equipment and supplies are distributed to schools from the Centers on a temporary or permanent loan basis. Many items are expendable and are not returned.

—Serving as a site for meetings to acquaint teachers and the community with the over-all program at the Center.

School personnel are encouraged to visit the Centers, become familiar with its resources, activities, and personnel. One center tabulated over 4,500 elementary teacher visits during 1969.

Among the materials available for loan are plant science kits, potting plants, incubators, brooders, chickens, rabbits, cavies, and other small animals. Larger animals such as goats, sheep,

(Continued on next page)
and pigs are available for the entire school year and turkeys are available for the Thanksgiving season. Also available are microscopes, microprojectors, rock sets and conservation project kits. Among the consumable materials available are feed and grain displays, woods and bulbs, plant materials, fertile chicken eggs, soil samples, soil mixtures, and self-experiment kits.

Environmental Study Area

A unique part of the elementary agriculture-science centers is the "Conservation in Miniature" environmental study area. At each center up to 100 school children per day learn about soil and water conservation. Various "working" and "riding" exhibits of scientific conservation practices include a miniature farm emphasizing the interrelationship of soil, plant life, and water. Another section stresses fire prevention and the value of chaps-al and forests in erodion prevention. A "working" Los Angeles basin flood control system model completes the conservation experience for children by realistically demonstrating how 93 percent of all rain water which falls on the county coastal basin is conserved through the use of spreading grounds.

A conservation investigational classroom is an integral part of the "Conservation in Miniature" field trip experience. This classroom is designed for the purpose of actually involving students in various investigations which relate to their environment. In conjunction with the various kits developed, bulletin boards of suggested agricultural science experiences have been compiled to help teachers develop and extend pupils concepts of living things and to assist teachers in using more effectively the materials contained in kits such as that of plant science, using the incubator, conservation, and earth science.

Mobile Units

In addition, four mobile units are used. The Dairy, Conservation, Small Livestock, and Wild Life mobile units each have a specialist and an animal care-taker-tractor driver. The units are brought to the elementary schools upon request. These large semi-truck and trailer mobile units are made available to the Los Angeles City elementary schools through a grant from the Sears Roebuck Foundation. The requests for these four mobile units are so great that they can usually visit the 450 elementary schools only once during a six-year period.

JUNIOR HIGH SCHOOLS

Over 21,000 junior and senior high school students take part in the agricultural education program in 59 schools. In the junior high schools, grades seven through nine, four course offerings are provided: exploratory horticulture, horticulture, floriculture, and introductory landscape horticulture.

Courses

Every seventh-grade boy is enrolled in a ten-week exploratory horticulture program which provides experience, fundamental skills, and knowledge in the production, care, and maintenance of plant material; insect identification and control; safety in the use of tools and equipment; and laboratory experience in soils, water, and plant nutrition. Also included is an overview of the board area of the agricultural sciences for career exploration.

Students who develop an interest in horticulture may enroll during grades eight and nine in a two-year elective course in horticulture. The course in horticulture stresses experiences in plant propagation, plant布局, greenhouse practices, introductory landscape, use of tools, and practical applications to home use and beautification.

Introductory Landscape Horticulture is a new elective course that provides opportunities for exploration and training in the field of landscape horticulture. It includes development of fundamental skills of plant production, offers instruction in the preparation of plants, and presents opportunities for participation in landscape construction projects.

Girls at the junior high school level are also involved in the program of agricultural education. An elective course in floriculture includes basic information on plant growth and horticultural practices along with experimences in course construction, floral arrangements, and use of ornamental plantings in home beautification.

Facilities

Facilities for instruction in agriculture and horticulture have been expanded. Every junior and senior high school built since 1950 includes a classroom, with rooms and tool-room facilities, laboratory room, boy's room, glass-house, and outdoor storage facilities. The agricultural unit is an integral part of the total school plant and is situated on a minimum of one acre of growing grounds.

Twelve horticulture centers have been developed to provide resource personnel, instructional materials, and maintenance services for the 87 junior and senior high school teachers in agricultural education. The facilities of the center, including workshops and power equipment, are available for use by teachers in the construction of teaching aids and the development of audiovisual materials such as charts, collections, displays, and transparencies. Demonstration plots for turfgrass and ground cover plants, plant identification, and landscape facilities are located at the center and available for students and teachers to use. Also available from the center are mobile instructional units that bring to the schools specialized instruction and equipment.

The mobile units are transported on vehicles with the driver qualified to demonstrate the use of that specific mobile educational unit; for example, the turfgrass equipment unit includes aerator, vertical mowers, tillers, sprayers and lawn mowers. An efficient and economic use of equipment and funds results when only two sets of such specialized equipment are needed to be utilized by 87 secondary schools.

HIGH SCHOOLS

The high school programs are more diversified and intensive. Courses are provided for academic, vocational, and general students. For a detailed description of the high school agricultural education program see the article "A Comprehensive Program of Agriculture Education in Los Angeles" in the October 1968 issue of The Agricultural Education Magazine. Briefly the courses offered in high school include general and vocational horticulture and agriculture, animal husbandry, floriculture, and plant and soil science, laboratory animal technology, horticultural mechanics, and landscape design, layout, and construction.

GENERAL EDUCATION

Agricultural education in the Los Angeles City Schools offers a wide variety of instructional programs in agricultural education. Many students are exposed for the first time to plant growth and other experiences in the plant sciences.

Urban youth need a basic understanding of the importance of the agricultural industry plays in the economic and social structure of our nation. Youth in cities need to have opportunites to participate in activities which awaken and develop an understanding of the need for natural beauty in their surroundings. And we in agricultural education have a major responsibility for providing information to a broad segment of students concerning the importance of agriculture in our economy, the dependency of urban areas on the products of the agricultural industry, and the responsibility to provide academic and vocational opportunities in the agricultural sciences.
Designing a Comprehensive Curriculum

T. L. Faulkner, Supervisor
Alabama Department of Education

What vocational agriculture continues to be, or whether vocational agriculture continues at all, in a school or a state will depend on our willingness to admit the death of the out-of-date curriculum for training to farms only. We know that vocational agriculture graduates will go where the jobs are. We only have to open our eyes to see the parade of young men either disinterested in our schools or high school and begging for non-farm jobs in agriculture industry for which most of them have not been adequately prepared.

Are we letting these rural youth down? Can we do better for them? Wherever they may be, the present and future job opportunities in the agriculture industry must be the focus on which to develop the vocational agriculture curriculum. If we accept the challenge of building the total AGRIBUSINESS INDUSTRY, the need and demand for vocational agriculture education will explode and expand as never dreamed of before.

COMPREHENSIVE CURRICULUM RURAL AGRIBUSINESS INDUSTRY

Following is a brief description of a comprehensive vocational agriculture curriculum that can and will work in a high school with either one or more teachers of agriculture. A tailor-made curriculum to fit the needs and interests of students in any school can be developed by this type of plan. It will prepare students for the total rural Agriculture Business Industry. It is versatile enough to develop students for entry level jobs in sixteen occupational areas. Here is how it can be done.

• The World of Work (7th or 8th Grade)

This course is an introduction to occupations in the world of work with some study of life science including the knowledge and skills required of the occupations in the state and nation. Simple hand tools and elementary basic skills are studied and practiced with wood, leather, plastic, electricity, and other simple arts and crafts. This course is a very limited number of students can enroll in courses pertaining to only one or two specialized areas of the agribusiness industry. Our obligation is to do our best to serve the most. That should be our big objective.

There is only one way to do the best for the best and that is to offer a comprehensive agribusiness vocational curriculum to all students, beginning in either the seventh or eighth grade and continuing through the twelfth grade. The need for starting early is to acquaint students with the world of work. The gradual process of guidance, orientation, and training, and practice will motivate students to make a sound selection of an occupational objective of his choice. Only after this is done, will students work and study with the needed interest and enthusiasm to succeed.

• Vocational Orientation (9th Grade)

This is a study of occupational subject matter and skill requirements of agricultural science and industry by all students including practice in a rotating basis, of some shop skills needed in the following occupational areas: agricultural production, agricultural supplies, agricultural mechanics, agricultural products, ornamental horticulture, agricultural resources, forestry, meat marketing, woodworking, masonry, building construction, power mechanics and electricity.

• Basic Agriculture and Industry (10th Grade)

This is a study of the basic fundamentals and basic shop practices needed in agriculture and industry. Occupational areas are covered as selected by individual students in the class. Each student selects one of the following occupations to study throughout the year: agricultural production, agricultural supplies, agricultural mechanics, agricultural production, ornamental horticulture, resources, forestry, meat marketing, woodworking, masonry, building construction, power mechanics and electricity.

This course provides gradual in depth study and will be based on the occupational objectives selected by students. Classroom, group, and individualized instruction is used extensively in this course. Supervised work experience is encouraged.

Students who complete the tenth-grade basic courses and desire to continue their study in a general occupational trade objective may be directed into an area of vocational school or some other vocational service for their eleventh- and twelfth-grade advanced study. Others may continue in Agriculture Industry courses.

• Specialized Agribusiness Industry (11th Grade)

Students in this course are grouped for specific practice and specialized study leading to employment in their chosen occupational field of the Agriculture Industry. The specialized agribusiness industry courses are in the following areas:

- Agricultural production: general farming, animal science, plant science
- Agricultural supplies
- Agricultural mechanics: general agricultural mechanics, agricultural production, woodworking, masonry, construction, power mechanics, electricity, agriculture products
- Ornamental horticulture
- Agricultural resources
- Forestry
- Other agriculture: pre-professional

Classroom and shop, including group and individualized instruction, will be used with each student following an individual study guide. Cooperative placement and work experience at school and at home are utilized.

• Advanced Agribusiness Industry (12th Grade)

This is a continuation of advanced specialized study and shop practice of the eleven occupational areas in the Agriculture Industry course. Time will be devoted to more in-depth study and advanced training in the classroom and in the shop. Each student will continue in the chosen occupational area and will follow an individual study guide.

Supervised work experience at home, on a farm, or in cooperative on-the-job training is required of each student. At the completion of this course, students must pass the job entrance level for any job in post-high school education. Students are encouraged to continue in their occupational objective and, on the reverse side, a record of supervised work experience. This certificate and record will be useful when applying for a job or when entering post-high school education.

MAY, 1970

T. L. FAULKNER, Supervisor
Alabama Department of Education

Commissioner of Education Issues Memorandum on FFA
January 29, 1970

Memorandum to Chief State School Officers and Executive Officers of State Boards for Vocational Education

Subject: Vocational Education Youth Organizations

On several occasions during the past few months, I have met with business leaders, representatives of educational and professional groups, and staff of the Office of Education concerning various aspects of vocational education, including the position of the Office with respect to youth organizations associated with this area of the curriculum.

It has also been my privilege during these months to meet with many of our Nation's young people, listening to their views on many subjects and learning about their activities and interests. As young people and young adults, with whom I have met are representatives of the Future Farmers of America and of similar youth organizations in vocational education, and I have been much impressed with and inspired by their attitudes and programs.

As you know, the Office of Education maintains a close relationship with such youth organizations and welcomes their cooperation and support in strengthening our programs of vocational and technical education. We strongly endorse their objectives and seek every effort to involve their thinking in the development of our programs and plans.

Our policy in this regard is as follows:
1. The Office of Education will provide advisory assistance to national youth organizations and to State agencies as part of the effort of Federal employees designated to serve in this capacity.
2. Federal-State grant funds for vocational education may be used by the States to give leadership and support to youth organizations and activities directly related to established vocational education instructional programs, under provisions of approved State plans for vocational education.
3. The purpose of the Office of Education in encouraging youth organizations, which are related to instructional programs, is to improve the quality and relevance of instruction, develop youth leadership, and provide wholesome experiences for youth not otherwise available within the schools.

It is not the role of the Office to mandate to the States specific programs or organizational structures as means to achieve the goals of vocational education. The responsibility for instructional programs and related activities rests with the States and localities. It is my belief, however, that increased efforts on the part of State Education Agencies to recognize and encourage the growth and expansion of the FFA and similar youth organizations are highly important and deserve the support of all leaders in American education.

The policies stated in this letter represent the position of the Office and its Bureau and Divisions concerned with vocational and technical education.

James E. Allen, Jr.
Assistant Secretary for Education and
U. S. Commissioner of Education

Department of Health, Education and Welfare
Pioneer Horticulture Program
in Elementary Schools

PETER J. WOTOWIEC, Supervisor
Cleveland (Ohio) Public Schools

Children in the Cleveland Public Schools have been receiving instruction in horticulture since 1901. The first organized children's gardening program was conducted at the Memorial School Garden, a garden constructed as a memorial to the children and teachers who died in the historic Giffenwood School fire. Over the years, a program of children's gardening has developed which reaches into the classroom and the child's home, as well as to special tracts of land located throughout the city.

The program is updated regularly to coincide with changing times. One significant outgrowth of the program was the initiation of vocational horticulture in the high schools in 1902. Over 400 high school students are now enrolled in vocational horticulture programs in Cleveland.

The NEEDS

As we become more urbanized, one might expect less need for gardening or elementary horticulture as an urban school curriculum. The converse is actually true. As we finally enter the era of environmental awareness, the gardening program actually assumes a greater importance in the curriculum. Gardening is a very relevant way of teaching youngsters how and where they fit into the environment.

Horticulture in the Cleveland Public Schools has many facets. In addition to the elementary grade programs which are described in this article, there are on the high school level vocational and avocational courses. The Cleveland Technical School, operated by the Cleveland Public Schools, has a post-high two-year horticulture technology program. Adult programs for homeowners and special courses for employers of horticulture businesses are also conducted.

GARDEN SCIENCE

The elementary level gardening program falls into three categories: garden science, home gardens, and trace gardens.

Horticulture is actually an applied science. Therefore, a significant part of the program is closely tied in with elementary science classes. The phrasing is garden science. Classroom lessons are developed which include teachers' guides and the necessary supplies for demonstration and student practice.

Garden science lessons for kindergarten through the second grade are basically indoor seed growing and plant growing. Upper elementary lessons include Rocks and Soil, Potting Dutch Bulbs, Forcing Dutch Bulbs and Lilac for Easter, Constructing and Maintaining a Terrarium, Forcing Paper White Narcissus, Cress and Grass, and Making Softwood Cuttings. During the spring semester several garden science lessons are directly related to the Home Garden Program.

These are How to Enroll for a Home Garden, Planting Cool Season Crops, Planting Warm Season Crops, and Summer Garden Care.

Most elementary teachers have a demonstrated background in plant science. Therefore, the majority of the upper elementary garden science lessons are coordinated with radio broadcasts and related programs. Adult programs for homeowners and special courses for employers of horticulture businesses are also conducted.

The agricultural education magazine...
What Do the Theorists Say About Occupational Choice?

JAMES P. KEY, Teacher Education
Oklahoma State University

"It may sound good in theory, but it will never work in practice." How many times have you heard this? Sometimes theory is viewed with suspicion by those interested in practical problems. There are times, however, when those interested in practical problems find that theories make a real contribution to the search for practical answers.

We are in vocational agriculture where the problem of making a living is a very real problem. The vocational training that we give our students is based on the assumption that we have found a method to help our students acquire the knowledge, skills, and attitudes to succeed in their chosen careers.

Theories of Occupational Choice

**Trait-Factor Theories**

The trait-factor theories (Person, 1905; Kline, 1915; and Hrd, 1928) state that an individual must have a clear understanding of himself, his abilities, interests, and limitations. He must have a knowledge of the requirements, conditions, and prospects in different occupations.

The personality theory shows the individual, represented by the personality, being satisfied through his own abilities and interests. The individual's perception of his needs and the need satisfaction ability of occupations determines the adequacy of the choice.

**Developmental Theories**

The developmental theories (Ginzberg, et al., 1951; Super, 1955) discuss the stages through which individuals develop. They state that individuals develop more clearly defined self-concepts as they grow older and compare these self-concepts to their images of the occupational world in trying to make career decisions. The adequacy of the decision is based on the similarity between the individual's image of himself and his concept of the career he is eventually choosing.

The developmental approach states that there are six occupational choices as the process of self-concept development through comprehensive choices and adjustments. The individual's self-concept develops through choices, and the choices are reorganized and adjusted through choices. The satisfaction resulting from the choices is largely determined by the accuracy of the individual's self-concept and image of occupations.

**Sociological Theories**

The sociological theories (Blau, et al., 1960; Miller and Fosm, 1960) are an almost entirely different approach to occupational choice. They state that there are circumstances beyond the control of the individual, specifically his social and environmental circumstances, largely determine the career he will choose. Therefore, the primary task of the individual in the choice process is developing techniques to overcome ineffective adjustments and reorganization. According to these theories, the father's occupation is the most important factor affecting the individual's decision. He must be considered as much as the influence of all the other factors that may be involved in the choice process.

The trait-factor theories support our methods of helping students make occupational choices. They help the individual to see the need for careful planning and decision making. The developmental theories are not concerned with the individual's need for self-concept development in the choice process. The sociological theories are concerned with the social and environmental circumstances that influence the individual's choice of occupation.

WHAT DOES IT MEAN?

What do the theories say to the vocational educators? Does it support our methods of helping students make occupational choices? What might be improved? The theories suggest several directions in which teachers of agriculture and others might move to improve the making of realistic occupational choices. First, we need to consider as many of the influences of the individual as possible. This may entail greater cooperation with guidance personnel and the use of personnel who can help the individual to make realistic occupational choices. Second, we need to consider the full implications of the occupational process brought out by the four theories. Taken together, they tell us the choice process takes place throughout the individual's life. This suggests that elementary school teachers should be concerned with the impressions created about occupations in the student's early years. This also suggests that guidance personnel should be involved with vocational guidance, as well as with educational and personal guidance, from elementary through secondary school. Administrators need to be concerned with providing opportunities for expanded occupational education for all students in the public schools.


Helping Elementary Pupils Learn About Agriculture

MALCOLM D. SWAN and GEORGE W. DONALDSON
Northern Illinois University
DeKalb, Illinois

The agricultural educator's role in —

"The nation's farms matched its industry with record crop production again this year, the Department of Agriculture reported in a year-end harvest of statistics that looked as bright as a field of Dakota wheat."

Each year the nation's largest weekly news magazine takes this kind of statement away in an appropriate section, but nobody needn't wish for joy. In almost any other part of the world this would be headline news; readers would dance in the streets.

The blunt truth is that Americans take bountiful harvests for granted and demonstrate unconcern and indifference toward their food supplies. Contrast this indifference with the thrust of famine, the short harvests, and the severe food crises perennially threatening families in South America, India, and most other Asian countries.

Lack of Concern

Why this indifference, this lack of concern for the nation's food and fiber? By far and large, teachers and the public schools have ignored agriculture. They have failed to orient the growing urban population to the needs, contributions, and limitations of America's agriculture.

This situation will not improve as the percentage of the population living on only one percent of the land increases from the present 75 percent to 90 percent by the year 2000, and as fewer and fewer teachers bring rural backgrounds to the schools. America has a new minority problem.

The fact is that most Americans do not understand their land or the people producing their food and fiber. Furthermore, too many people do not care.

The other side of the coin is that agriculture and farm leaders have tended to ignore the nation's schools. Other than a few scattered workshops in conservation and a rare spring visit to a school to stir up enthusiasm for the FFA or 4-H clubs, vocational agriculture teachers, county agents, and farm leaders do little to bring the needs of the farmers and other agriculturalists to the attention of classroom teachers. They provide or offer them little in the way of real help in teaching about farms, farming, and other aspects of agriculture.

Young teachers, in particular, tell us they know nothing about agriculture. They inform us that it is nearly impossible to find a farm to use for a field trip or for instructional purposes. When we suggest that they contact vocational agriculture teachers and county agents in their communities, they usually seem surprised that such persons exist or that they could help. It is about time that agricultural educators did something about this.

Agriculture in the Curriculum

Although a little time is spent on agriculture in elementary school social studies, few children, even in rural communities, actually see the soil being tilled, a crop harvested, or a cow milked. Even fewer students have pushed a laying hen aside to find a Warm egg. Many misconceptions exist about farms, plants, animals, and other aspects of life that are corrected by this trip in which a willing farmer answers pupils' questions. Let's face facts—even many of the boys and girls living in rural America all their lives have never seen or done many of the things that highlight many first-grade farm field trips.

Although children study about wheat in Kansas and Montana and sing about "amber waves of grain" their only real contact may be as remote as a whitened, irradiated loaf of bread. Let's enable these readers and singers to walk through a field of ripening grain, watch a combine in operation, and tickle seeds through their fingers. Their school studies then will take on real meaning.

Taking children to farms to measure and compute answers to down-to-earth problems has two benefits: some understanding and appreciation of farming are gained, and direct applications for concepts presented in textbooks are provided. Calculating the volume of a cylinder makes more sense after seeing a silo being filled, Relationships between areas and perimeters become more clear when an alfalfa field is used for on-the-spot applications.

Much of the basic subject matter of man's relationship with the soil can best be illustrated where the two are intimately involved—where man tills the soil and the soil guarantees his survival by distorting this resource. Through experiences on farms children may see that conflicts exist between our present requirements and the need to pass on resources to future generations.

Conservation problems, with all their gray shades exist on farms, and farms are the best places to teach them.

Changing Attitudes

The recent decades have been the first in mankind's history in which an entire nation was more concerned with "too much food" than with "too little food." Agriculture still is being called a major economic problem and over-supply a national menace. Rank and file Americans do not see farming as one of their most successful industries which it assuredly is, and oddly they do not consider the unique abundance provided by farms to be a blessing. Providing children and their teachers with farm experiences as a part of their education is something that can help to change this attitude.

In the future, as today, adult Americans will contact and affect agriculture primarily as consumers, voters, and taxpayers. Their experiences with agriculture and farms, while in school, will linger throughout adulthood and contribute substantially toward feelings of warmth and pride for the nation's farm people. Helping all students to have the right experiences is a major responsibility of agricultural educators.
Agricultural Education Must Change with the Times

DONALD J. WATSON
Teacher of Agriculture
North Syracuse, New York

This is my thirty-second year of teaching agriculture. I came to the North Syracuse Central Schools in 1921 and have taught in the system continuously since that time. In 1941 we were a small school with all grades from one to twelve. Now we have a high school with 3,600 students enrolled in two buildings.

As you can see, farms were used for houses, schools, and highways. As Syracuse is the hub city of New York State, this represented a change in our agricultural education program. A dual-purpose program including vocational agriculture and agricultural related courses was developed. Courses in conservation, horticulture, and farm welding were added to the regular production and management courses.

Graduates

Many good farmers have become established in nearby areas where land values are not so expensive. Others graduates, both boys and girls, have been placed in agriculturally oriented fields like veterinary, farm machinery, horticulture, managers of agricultural cooperatives, operators of fertilizer plants, artificial inseminators, lawn and garden stores, golf course turf management, nursery management, landscape consultants, tree farming, appraisers, wood pulp processing, supermarket vegetable departments, horticulture, truck repairs, and conservation workers.

Many boys go into military service, but when they are discharged, they enroll in agricultural and technical schools for advanced education. Their careers have been influenced by high school courses in agriculture; therefore, when the opportunity is available, they choose agriculture as the field in which they desire to be established.

The Program

The agricultural education program involves cooperation with the guidance departments. Through guidance personnel in the middle schools we conduct prospective ninth-grade students by the use of slides and lectures about the activities of the agricultural education program. Our ninth-grade orientation course acquaints students with the occupational fields of the agriculturists complex.

During the junior and senior years, emphasis is on higher education and establishment in agricultural occupations. Many means are used to acquaint students with agriculture. Some examples are:

- Field trips to agricultural firms
- Speakers from agricultural firms
- Cooperation with Industrial Co-op program of the school
- Trips to the Agricultural and Technical Schools; visits by representatives of the schools to inform students of requirements, prices, salaries, and other related information
- Use of bulletin boards made from materials from guidance officers, state colleges, and agricultural companies
- Use of the advisory board which includes members from agricultural firms
- Junior agronomy people to our annual FFA banquet
- State fair exhibits for agricultural mechanics which include many building projects; entries in the Lincoln Welding Contest
- Annual tours of related occupations with the Syracuse Kiwanis Club
- Continuing education for adults in farm and home shop, dairy, and horticulture
- Speaking at service clubs, service groups, and garden clubs

Change

A teacher who changes his curriculum must project his needs abroad; thus agricultural meetings, and all trend conventions like state and national meetings, workshops, and field days are looking and willing to try new ideas. Also, he must take advantage of courses offered by colleges and industry.

Robert D. Cottom, Instructor
Joliet Junior College
Joliet, Illinois

A real goal of education is to get a reaction from students, to spark thinking, or maybe even bring about a change in thinking. The Suburban Living course at Joliet, Illinois has received a favorable reaction from students. In fact, one student had to call me to come in and get it out of the way, "I like it!"

General Education

Suburban Living is an elective junior semester course designed to present agricultural information needed by city and suburban youth no matter what their intended occupations. The course grew out of a six-weeks unit of instruction on agriculture formerly taught in a general shop course taken by all freshmen. When the six weeks of agriculture were dropped from the general shop course in 1964, there was a void. At a meeting with administrators and the agricultural advisory council, Max Kuster, Chairman of the Agriculture Department, stated: "I firmly believe, as a part of general education, that everyone should have some instruction in agriculture." The remainder of the meeting included the proposal for a new type of agricultural education — Suburban Living — which was implemented at Joliet Township High School.

Kuster used these arguments in pointing out the need for the course. "As you take the freeways, the tollways, or the main highway across this great country of ours, what do you see? It's all agriculture. It is a major crime that children and adults don't know the difference between wheat and corn, or grain and _____________. The bread of the world is almost all agricultural, and the common farm machines are or what they are doing. I had a required course in art and another in English, so I could better understand and enjoy my environment. If a person in Joliet could have six weeks of agriculture, they say it was the best six weeks they had ever spent."

Why?

Why is a course like Suburban Living important to high school students? Agriculture is a major section of our economy upon which all are dependent. Agriculture is our basic industry. Many people today are becoming less and less aware of where their food comes from.

It has been predicted that by 1975 we will need one-third more farm products than we are now producing. A program of general agriculture is necessary so that students may understand the total environment in which they are living. Even with a reduction in the number of farms, the United States still has more farms than it has other types of business. No other industry is more affected by public policy which all citizens share in making. All are consumers of agricultural products.

Objectives

There are four major objectives of the Suburban Living course:

- To develop an understanding of what takes place in rural areas.
- To make students aware of the origin of food and cooking.
- To develop an understanding of natural resources and their use and conservation.
- To present and promote the use of agricultural information.

The emphasis in education is to meet student's needs, thus one Suburban Living student perfectly stated the rationale for the course: "I figured it might help me in later life!"

Students

Forest ranger, teacher, nurse, secretary, college student—where do students go after completing high school? They go to the same places that all Suburban Living students go. In a survey of one class of Suburban Living students, 20 percent said they would go on to college. Their occupational aspirations included telephone company employee, computer programmer, and one professional football player. Many Suburban Living students are interested in sports. When asked their (Continued on page 287)
Agricultural Education from Kindergarten to Senior High School

James T. Horner
University of Nebraska

Recently I received a phone call from an administrative officer in one of Nebraska’s metropolitan school districts volunteering that his district’s schools for pilot-testing instructional materials for elementary and junior high school students pertaining to the exploration of and orientation to the world of work. This administrator saw many agricultural occupations as his district as well as the need for pupils in the schools to acquire knowledge and understanding of agriculture.

A project of the Department of Agricultural Education at Nebraska involves the development of slides, interview tapes, and other materials for 100 occupations in eleven occupational families or clusters. Agriculture is the first occupational family of which materials are being developed.

These instructional materials are designed “to assist individuals in making informed and meaningful occupational choices” and “to familiarize individuals with the broad range of occupations for which special skills are required and the requisites for careers.” These purposes of vocational instruction are instruction in the rules and regulations pertaining to the operation of the Vocational Education Amendments of 1968. This article describes an agricultural education program in the Omaha Public Schools designed to accomplish these purposes.

Farm Becomes a School

The 167-acre Two Rivers School Farm became available when the Federal Government declared it surplus in 1964. Conversion of the old school into a farm was no small task. Much planning was required by administrators, teachers, and vocational educators who sought assistance from an advisory council of consultants from industry, the state Department of Education, and teacher educators.

One of the early sections of the advisory committee wrestled with the questions of philosophy and long-range purposes of the school farm. The following statement resulted: “In addition to teaching vocational agriculture and agricultural techniques, the farm can be used for nature study, field trips, science projects, and surveying and topography in advanced mathematics courses. To those enrolled in other programs of the school system, the Two Rivers School Farm will become a nearby source of information. Kindergartners might find the school farm an ideal place to see cattle and sheep and learn more about farm animals. Older students can follow a model farm to gain more information of the outdoor habitat.”

Objectives

An earlier study of the metropolitan area of Nebraska revealed that 12 per cent of the employed males in metropolitan areas were working in occupations which require agricultural knowledge and skill. An additional 20 per cent who were not engaged in agricultural occupations expressed an interest in agricultural knowledge or skills. With these data and the statement of purposes of the school farm, the following specific objectives for the agricultural education program evolved:

- To develop an understanding of the role of agriculture on the part of all students. This would involve units of agricultural information in elementary grades, instructional and pre-vocational junior high courses for girls and boys, and courses in general agriculture such as economics and livestock and live stock products.
- To prepare persons for production agricultural jobs.
- To provide persons for non-farm agricultural employment.
- To provide a course in agricultural science for seniors.
- To contribute to the solution of agricultural-social migration adjustment problems.
- To provide facilities for training and retraining workers, including adults, in agricultural industries.

Once the purposes of the program were clearly conceptualized, the committee focused its attention on the scope and resource requirements and availability. It was concluded that for many of the high schools, fifteen junior high schools, and all elementary schools, a minimum of one classroom teacher or unit coordinator to instruct elementary teachers with one cultural unit, should be included. No less than ten teachers, including a supervisor, would be required within five years.

Elementary School Program

Prior to 1966, the elementary schools week students to the zoo and a forest center to instruct them about nature and animal life then related this to farming. Most teachers found this quite satisfactory, so during the 1965-66 academic year, the principal and superintendent were extremely excited about the possibilities of incorporating biological science, nature study, and animal and farm life learning units into the curriculum through the use of the farm.

An Outdoor Education Curriculum Committee was formed to develop an outdoor education curriculum for the farm. The committee formulated an exceptionally good guidebook to be used by elementary teachers prior to, during, and after trips to the farm. The guidebook provides instruction for the teachers and materials that they can use in instruction with students. Examples of units in the guidebook are "Concepts About Farms" and "Farm and City Interdependence." It is well illustrated and includes such items as suggested activities, vocabulary, and an extensive bibliography of books for children, films, and teacher resource materials. At the present time there are approximately 75 educational tours through the farm for elementary classes per year. Most of the tours are conducted in the spring and fall. The grade level varies from kindergarten to fifth grades. It is planned that every sixth-grade student will visit the farm at least once a year. The farm tours are usually scheduled for one-half day in length.

Pre-Vocational Program

Still in the planning stages is a pre-vocational agriculture course offered in the junior high schools. The intent is to offer agriculture to both boys and girls. The course is called pre-vocational because the course offering will include an explanation of what agriculture really is. Planned are many field trips to the multitude of agricultural businesses in the Omaha area. At all times emphasis will be upon the different levels of employment, various skills and technical knowledge needed, and various types of businesses involved in servicing and processing agricultural products as well as the educational requirements needed to obtain employment in these agricultural jobs.

High School Program

Two Rivers School Farm places vocational agriculture in a different perspective. Here group interests are encouraged, so more one-on-one contact might be responsible for a particular animal or project. The use of the farm as a classroom is not just another type of facility, nor is it necessarily to teach how to become farmers. Today there are a great many agriculturally related jobs that cannot be filled because of the lack of people with proper preparation. Thus, one role of the farm is to teach skills and agricultural technology related to the farm. These skills include such things as how to work, practical application of learning, and learning by doing. Skills of this type are related to many different areas in agriculture, everything from chemistry, biology, English, machine technology, and other subjects.

A Course on Suburban Living (Continued from page 285)

mals interest in enrolling in the Sub- urban Living course. Students first studied nature and 60 per cent said agriculture. Twelve per cent of the students took Suburban Living because they thought it would help them later in life. But interestingly, approximately 70 per cent of the students indicated they enrolled in the course because of the credits an average group of students would receive.

Content

Teachers sometimes forget that students take courses just because they enjoy a topic. Pollution, ecology, and agriculture, to students, the course is the topic that caught the attention of one student. Other course units include:

- Cropping: study of crop production, agricultural machinery, and food marketing and processing.
- Conservation: emphasis on wildlife conservation as it relates to environmental pollution, housing, and animal population.
- Livestock: production practices, buildings, and equipment, and animal breeding.
- Herbs and herbs: the recreational aspects of pets, proper training, breeds, and their special characteristics.

MAY, 1970
Catching Up on the Supply of Teachers of Agricultural Education

RALPH J. WOODIN
The Ohio State University

According to most coaches, "catch up" football is difficult to play — yet this has been the name of the game in preparing teachers of vocational agriculture during the past decade. There has been a teacher shortage each year since 1960. Even though there has been a 50 percent gain in the number of teachers prepared there is still a shortage — a real shortage.

Studies of supply and demand for teachers of vocational agriculture have been made each year since 1963 as a guide to a national recruitment effort. During this period some trends in demand for teachers and in types of positions have become apparent. A common format has been followed in each study. Data are obtained from university supervisors in each state and teacher educators in 77 colleges and universities preparing teachers of agriculture.

More Teachers Qualified

The largest number of teachers during any of the last ten years was qualified in 1969. During 1969, 77 different teacher education institutions qualified 1,350 teachers. While the largest increase for a single year occurred in 1969, more teachers have been qualified each year than in the preceding five years for the past five years. This gain of teacher supply can be attributed to a concerted, unified recruitment effort by the profession.

A slow but steady growth in vocational agriculture in the nation has taken place. Table 1 shows a total of 11,557 positions in 1969 including positions in technical institutes, community colleges, and similar institutions.

Appropriately about 60 percent of these qualified for vocational agriculture. Most of the factors discussed earlier can be expected to enter into the profession. In 1969, 57 percent of those qualified entered teaching. Of the 43 percent who did not become teachers of vocational agriculture, 11.4 percent taught other subjects, 5.3 percent entered graduate work, 8.4 percent entered the armed forces, and 3.7 percent entered farming. The remaining 10 percent entered a wide variety of other occupations. The low percentage of persons entering teaching makes the task of recruitment greater and is probably caused by the availability of employment opportunities in a wide variety of agricultural areas.

A high rate of turnover continues to add to the demand for teachers. Last year the percentage of turnover was higher than usual, totaling 11 percent. This high turnover rate is brought about in part by better salaries in competing fields.

Table 1

<table>
<thead>
<tr>
<th>Year</th>
<th>Teachers Needed But Not Available</th>
<th>Number Qualified for Teaching</th>
<th>Percent Qualified</th>
</tr>
</thead>
<tbody>
<tr>
<td>1965</td>
<td>10,757</td>
<td>1,058</td>
<td>10.0%</td>
</tr>
<tr>
<td>1966</td>
<td>10,925</td>
<td>1,415</td>
<td>11.1%</td>
</tr>
<tr>
<td>1967</td>
<td>11,253</td>
<td>3,083</td>
<td>27.7%</td>
</tr>
<tr>
<td>1968</td>
<td>12,006</td>
<td>2,557</td>
<td>21.3%</td>
</tr>
<tr>
<td>1969</td>
<td>15,600</td>
<td>2,557</td>
<td>21.3%</td>
</tr>
</tbody>
</table>

Table 1 shows a five year comparison of information on supply and demand of teachers of vocational agriculture.

Teaching Positions by Regions

The largest number of teachers in 1969 were Texas with 1,199, North Carolina with 690, California with 544, Illinois with 453, Alabama with 390, and Oklahoma with 315. The number of new positions in teaching vocational agriculture was highest in the Central Region with 98 new positions, followed by the Southern Region with 79 new positions, the 28, and the Atlantic Region with 27.

States adding the largest number of new teaching positions in vocational agriculture included Ohio with 55, Texas with 45, Florida with 21, California with 13, Minnesota with 12, and Virginia with 10. The most acute shortages of teachers in 1969 were reported in Virginia, Florida, South Carolina, South Dakota, California and North Carolina. Three six states alone were short 60 teachers on August 1, 1969.

Graduates by Regions

There was a close relationship between the regions with the largest number of teaching positions and the largest number of qualified graduates. The Southern Region had 1,366 teaching positions and 696 qualified graduates of which 355 (51 percent) were placed in teaching. In contrast, the Pacific Region had only 1,355 teaching positions, prepared 157 teachers of which 137 (72 percent) were placed in teaching vocational agriculture. The Central Region was midway between the Southern and Pacific Regions with a 61 percent rate of placement. The Atlantic Region placed 51 percent of the 104 qualified graduates taking positions in teaching vocational agriculture.

States which qualified the largest number of teachers of vocational agriculture in order to hold a teaching position included California, Texas, Oklahoma, Illinois, 91, Ohio, 71, Oklahoma, 67, Wisconsin, 65, Alabama, 63, California, 52, New York, 51, Mississippi, 49, and Iowa, 44.

Of the 77 institutions preparing teachers of vocational agriculture, 98 with the largest number of the most graduates qualified in Agricultural Education in 1969, the five institutions with the largest number of the most graduates qualified in Agricultural Education in 1969, the five institutions with the largest number of the most graduates qualified in Agricultural Education in 1969 were: State University with 71, Oklahoma State University with 67, Illinois State University with 67, State University of New York at Stony Brook with 54, and Stony Brook College.

A recent article in the New York Times points out that the national teacher shortage is about over. This may be true for most teachers, but it appears that "catch up" will be the name of the game in preparing teachers of vocational agriculture for the next several years and that a determined recruitment effort on the part of the profession can do much to meet the situation. Teachers of vocational agriculture, assisted and supported by the entire profession, can markedly increase the supply of qualified teachers of vocational agriculture.

Ralph J. Woodin, Professor of Agricultural Education at The Ohio State University, is Chairman of the Professional Personnel Recruitment Committee of the Agricultural Education Division, AYA. A copy of the study reported in this article, "Supply and Demand of Teachers of Vocational Agriculture in the United States for the 1969-69 School Year," may be obtained from the author.

Ralph J. Woodin

Types of Teaching Positions

Some change in the responsibilities of teachers of vocational agriculture showed up in 1969. About two-thirds of the teachers taught both high school and continuing education classes for adults and young farmers. Only 24% teachers were full-time teachers of high school and adult former classes. The comprehensive or general high school was the institution in which 56 percent of vocational agriculture departments were located. Overall 70 percent of teachers were in area vocational schools, and less than one-half of one percent were in vocational high schools. About 70 percent of their students were in single teacher departments.

In terms of the kind of programs taught, the percentage of teachers offering full-time production agriculture programs decreased from about 60 percent in 1967-68 to 40 percent in 1968-69. At the same time, the number of teachers offering part-time production agriculture with one or more classes in specialized programs such as agricultural supply and agricultural mechanics represented 37 percent of the total. This represents a substantial increase over the previous year.

Looking Ahead

The study suggests that a short supply of teachers of vocational agriculture will probably be in the picture for the next several years and that a determined recruitment effort on the part of the profession can do much to meet the situation. Teachers of vocational agriculture, assisted and supported by the entire profession, can markedly increase the supply of qualified teachers of vocational agriculture.
Using FFA Camp Facilities for Outdoor Education

JOHN H. DAVIS, Supervisor
Ohio Department of Education

Sixth-grade pupils from Tarrant County (Ohio) Schools spent an outdoor evening on camp facilities of the Ohio FFA Association.

The next day, most of the pupils returned home, but six remained for another two days of camp life.

**MAY, 1970**
Instruction in Agriculture Through a Consumer Education Course

JOHN HILLSON
Agricultural Occupations Instructor
Mt. Carmel, Illinois

Interesting some high school students in agriculture can be accomplished by a consumer education course. At Mr. Carmel High School we achieve this through a Consumer Living course. The course, suggested by the agriculture department advisory council in the spring of 1968, was started in the fall of 1968.

The main objective of the course is to prepare high schools for becoming consumers of agricultural products. The semester course is divided into two main parts corresponding to the school's nine-week quarter system. One-half of the semester is spent with instruction on selecting meat and livestock products. The other half is spent on establishing and maintaining lawns and landscaping. The sequence of the instruction depends on the semester.

In the fall semester, the course starts with lawns and landscaping and ends with meat. In the spring semester, instruction begins with meats and ends with lawns and landscaping.

Instruction

The units of instruction for the semester course are as follows:

- Establishing lawns: grass seed selection, preparing the seeded, time of planting, using fertilizers, and tests
- Maintaining lawns: identification of weeds, lawn diseases and lawn insects, use of herbicides, insecticides and pesticides, lawn renovation techniques
- Lawn mower care and safety: lawn mower selection, lawn mower use, care of the small engine and mower, safety precautions for moving
- Landscaping: tree selection, tree placement, shrub selection, shrub placement, flower selection, flower placement
- Gardening: site selection, seed selection, equipment to use, fertilizers, use, pesticide use, time of planting
- Beef meat selection: identification of retail cuts, wholesale cuts, and carcasses, explanation of beef grades and values, explanation of various meat preservation methods
- Pork meat selection: identification of retail cuts, wholesale cuts, and carcasses, explanation of pork grades and values
- Chicken meat selection: identification of retail cuts, wholesale cuts, and carcasses, explanation of chicken grades and values

References and Activities

The references used in the lawns and landscaping area are from the University of Illinois. The references used in the meat areas include the book, The Meat We Eat, and the "Meat Identification Kit" published by Inter- state plus various publications from the National Livestock and Meat Board.

A tour to the meat department of a local grocery store supplements the classroom instruction in meats and meat selection. To supplement instruction for establishing and maintaining lawns, other students grow various grass seeds in a germinator.

There have been 21 students enrolled in each Consumer Living course this year for a total enrollment of 44. The students enrolled in the course include sophomores, juniors, and seniors.

Subscription Notice

All subscription orders for THE AGRICULTURAL EDUCATION MAGAZINE should be sent to:

Dale Boyd, Business Manager
THE AGRICULTURAL EDUCATION MAGAZINE
Box 5115
Madison, Wisconsin 53705

For groups, list in alphabetical order giving the complete mailing address and zip code for each. Make checks payable to THE AGRICULTURAL EDUCATION MAGAZINE.
Students Need Help in Choosing Occupations

VANIK S. LADDY, Teacher Education
Auburn University

The socio-economic status enjoyed by the family is directly related to parental occupational attainment and job prestige. Job status is conditioned by the socio-economic status of the family, by the availability of a realist vocational, and by the extent to which these factors are utilized by the children. Close personal contact with youth during the exploratory and establishment stages could provide vocational education opportunities to exert an influence on occupational choices, second only to that of parents. If these statements are true, why have we failed to rise to the challenge?

In a recent study (Raddy, 1968), it was concluded that high school vocational agriculture students were better prepared to make occupational decisions than occupational choices. Educational aspirations were exceeded by 15 percent of the students, but occupational expectations were not corrected by 41 percent of the students. The latter figure should cause concern among vocational educators in programs which are authorized and funded based upon the training of students for their chosen occupational objectives.

The importance of individual counseling is that students gain vocational and occupational plans should be recognized by all educators. At the conference provides excellent opportunities to supply information needed by students in vocational choice-making. Evidence indicates that a majority of high school students are never provided the opportunity for a personal conference with guidance counselors or teachers concerning course choices or occupational plans. A study involving vocational agricultural students revealed that 49 percent of the students had discussed their career choices with guidance counselors. Course choices were discussed with teachers by 44 percent of the students. Only 36 percent of the respondents discussed occupational plans with guidance counselors, and 35 percent of the students indicated that they had been advised on matters by teachers (Raddy, 1968).

It has been well documented that vocational education is not available to the majority of students. Moreover, data reveal a weakness in the ability of high school youth to use occupational information in career choices. Kaufman (1967) states, "Most young people of high school age have very little occupational knowledge. Such information as they have is more often based on popular myths and upon hearsay rather than on factual data. In the absence of information, occupational choices are either postponed until after high school or made because of identification with a particular occupation. If this condition exists, it is typically changed after the individual leaves school."

Suggestions

Based on research findings, the following suggestions are offered for the improvement of vocational education in the public schools.

A functional, comprehensive program of general and vocational education should be established in the public school system. Such an organization could be very beneficial in preparing persons of all ages and abilities for job entry and advancement. The strength of the program should include the preparation of the teaching personnel to use the teaching approach. Through utilization of the services of each of the academic, vocational, and the general educational systems in the school, the educational resources of the school are brought to bear upon the development of students.

A philosophy of educational opportunities for all students should be adopted and practiced. Teachers should be provided with the tools necessary for teaching and developing a broad range of educational experiences in the classroom. Teachers need to work closely with students and administrators to provide practical vocational and realist work experiences.

A national convention and six regional leadership conferences are held each year in which most associations send delegates. The 1970 convention will be held in New Orleans the first part of December. Regional leadership conferences will be held as follows:

REGION I
May 1-2, Phoenix, Arizona
REGION II
June 25-26, Gunnison, Colorado
REGION III
June 18-19, Athens, Texas
REGION IV
July 13-15, Osage Beach, Missouri
REGION V
August 7-8, Athens, Georgia
REGION VI
August 10-11, Morgantown, West Virginia

For the most part NVATA must rely upon the state associations to keep members informed. This can be done by including excerpts from "News and Views of NVATA," set in the state association newsletter. NVATA also goes to all state and national supervisory and teacher education personnel. Each NVATA president sends a monthly newsletter to state association officials in his region including all district and area chairmen. These officials then send out monthly newsletters also go to head state supervisors, head teacher educators, farm orientation leaders, and others. A national convention and six regional leadership conferences are held each year in which most associations send delegates.

JAMES WALL
Executive Secretary

A recent national survey conducted by NVATA revealed that some members are almost totally unaware of the aims, purposes, and activities of the NVATA. Others do not understand the reasons for professional organizations. Some wrongly believe that the main activity of NVATA should be the development and distribution of teaching aids and materials.

For any organization to be successful its membership must be kept informed. Keeping members informed is the problem. With a membership of over 10,000 and annual dues of only $5.00 it is impossible to contact NVATA members on a one-to-one basis. However, NVATA probably does as good or better job of informing members than do many other professional organizations.

A monthly newsletter, "News and Views of NVATA," is sent to all state association officials. It also goes to all state and national supervisory and teacher education personnel. Each NVATA president sends a monthly newsletter to state association officials in his region including all district and area chairmen. These officials then send out monthly newsletters also go to head state supervisors, head teacher educators, farm orientation leaders, and others.
Stories in Pictures

ROBERT W. WALKER
University of Illinois

Spooner River College students in Farm Machinery Technology reassemble a tractor engine after overhauling under the supervision of Jesse Brandsheim (center), instructor. (Photo by Donald Winters, Spooner River College, Cadot, Illinois)

Students at Wellsville (Maryland) High School study the effects of hazards such as improper bolting, inadequate wiring, and voltage loss using the electrical demonstration board. (Photo by James Pope, Maryland Department of Education)

Work scholarships for $100.00 are presented Jerry Lane (left center) and Steve Fisk, agriculture students at Eastern Kentucky University. Making the presentations are Brian Burton (left) and Gary Estill (right), officers of the Agricultural Club at Eastern Kentucky University. Money for the scholarships, matched by an equal amount from the Agricultural Club, was contributed by local merchants. (Photo by Glenn Hayes, Eastern Kentucky University)