

THE VISITOR

Devoted to the Interests of Agricultural Education in Minnesota Schools

Volume XLIX

April 1962

No. 2

AGRICULTURAL EDUCATION FOR A CHANGING RURAL AMERICA*

A. Webster Tenney,

Department of Health, Education and Welfare

We are living in an age of great progress in science, medicine, manufacturing, education, and in other fields. We have developed the highest standard of living the world has ever known. We have created many new industries. Our atomic submarines continue to set new records as they travel the oceans of the world and our rockets point the way to a new era of transportation. The rapid progress being made in the field of health is continuing to extend the life span of our people. This nation is rich with the promise of new and better things for tomorrow.

The glamour of the satellites and the magic of color television help us to forget the basic elements that have made possible this outstanding progress.

The important achievements of our nation have been brought forth by the workers who fly the planes, conduct the research, work in the factories, till the soil, distribute the products, and perform the other occupations essential to the economy. Many do not realize that our great progress today would have been completely impossible without the significant advancements that have taken place during the past 50 years in agriculture. Agriculture is the foundation on which our progress is based.

The remarkable progress made in agriculture has been brought about by agricultural research, the development of machinery and equipment, the training of agricultural specialists by the colleges of agriculture, communications, farm organizations, agricultural extension, and the instruction offered in vocational agriculture by the public high

schools. Vocational agriculture has been given the responsibility by the states and the federal government to provide systematic instruction in agriculture for farmers and their children. There can be little doubt that this public education program has had a tremendous influence in improving the efficiency of the American farmer.

All persons who have shared in the development of the sound programs of agricultural education that are in operation today throughout the nation are to be commended. We truly have a firm foundation on which to build.

It is not my intention, however, to review the history and development of the program. I prefer that we look to the future. The 1960's are ours. The 40's and 50's are cancelled checks.

Rural America Changes

If I were to select one word that will best describe what is happening in rural America today, it would be the word "change." For many years dramatic things have been happening in the rural community. At present there are some 40,000 school districts in the nation. The number has been declining rapidly for many years. The trend needs to continue. Some educators believe that we should have no more than 10,000 school districts in order to provide the broad curriculum needed to insure a better choice of courses for students. The number and the size of these districts has a direct bearing on the types of educational programs that can be offered.

The improved transportation and the creation of many new jobs in rural America have made it possible for one-third of our farmers to work off the farm for 100 days or more each year. This is having a wholesome and stimu-

*An article appearing in the March 1962 issue of the *American Vocational Journal*, from an address delivered to the Agricultural Division of AVA at the 55th annual convention.

THE VISITOR

Published quarterly during the calendar year in January, April, July, and October by the Department of Agricultural Education, University of Minnesota, St. Paul 1, Minnesota.

Entered at the Post Office in St. Paul as Second-Class Matter.

THE STAFF

HARRY KITTS GORDON SWANSON
R. PAUL MARVIN STANLEY NELSON
M. J. PETERSON, *Editor*

lating influence on improving their standards of living, on the stability of the communities, and upon farm life in general.

We have been privileged to see the important impact that the new developments in science and technology have had upon the farm. John Strohm, prominent agricultural writer and world traveler, after he had toured Red China and Soviet Russia said:

"Mechanization has made the American farmer the envy of the world. In Red China 85 percent of the people work like slaves to provide a skimpy rice diet for themselves and the other 15 per cent. In Russia, 50 per cent of the people still are on the land. Here in the United States, modern farm machines have made it possible for one farmer to feed himself and 25 other people. Only 10 per cent of our people are on the land. And that is the thing that makes our high standard of living possible."

We are all aware that our population continues to increase at an unbelievable rate . . . It is predicted that we will have a population of 245 million by 1980, 353 million by the year 2000, and a population of about one billion a century from now if the present birth rate continues. Surely the place of the American farmer and of those who serve agriculture is secure in the years ahead.

We are familiar with the rapid growth in the work force. The Bureau of the Census expects that the number of workers will increase by 13½ million to 87 million from 1960 to 1970. Population trends indicate that 26 million young people will enter the labor force during the 1960's.

It is essential for us to give thought to the employment of young people and adults who live in rural America. We know that many of

these persons must seek employment outside farming. Even though there is a substantial reduction in the number of farms and in the number of farm workers, farming is still the largest and most important of all industries in the United States and will continue to employ millions of persons. Agriculture today has an investment of 205 billion dollars and annual sales of 46 billion dollars.

Youth Require Training

The great growth in the population and the increases in the work force are sound evidence that there will be a need for efficient farmers tomorrow. There is likewise a vital need for instruction in vocational agriculture. Statistical reports indicate that some 70,000 farm boys are being graduated from courses in vocational agriculture each year. About 40 per cent of these graduates become farmers.

Not nearly enough boys are being trained to fill the vacancies on commercial farms that are being created by death and retirement of established farmers. Thousands of communities are not being served by vocational agricultural programs. Many boys who are going to become farmers are not able to receive systematic instruction in agriculture.

Likewise, there is an urgent need for the expansion of programs for young and adult farmers. Statistics show that of the one million young farmer prospects, only 65,000 are reached through systematic instruction in vocational agriculture, and of the 4 million adult farmer prospects, only 265,000 are reached.

What are the implications of the changes that are taking place in rural America for programs of agricultural education? There are many. The reorganization of school districts is making possible the creation of larger high schools. This is pointing the way to the development of more effective programs of vocational agriculture by providing more multiple teacher departments and by better selection of students.

There are still thousands of small high schools that are not financially able to offer courses in vocational agriculture. There is a need for the additional development of area programs such as those established in Connecticut whereby boys enrolled in small high schools may go to an area school and study vocational agriculture.

Problems Are Different

The increase in the size of farms is having

a direct influence on vocational agricultural programs. New problems are facing the vocational agricultural student in connection with becoming established in farming. We must give additional thought to the place of partnership and to the incorporation of farms. We must emphasize the development of challenging supervised farming programs rather than projects.

In many cases it may be advisable for the student to become a partner in the total business rather than to own an individual project. Boys who have limited opportunities for farming should be placed on a commercial farm for planned work experience which will involve not only the operator of the farm but also the parents, student, and teacher of vocational agriculture. This is an area that needs much additional attention.

The continuing increase in investments in agriculture is creating new problems for farmers. We know that the average investment per worker in industry is \$15,000. In the Middle West the average farm operator has \$50,000 invested in farming. The large use of capital by farmers, the purchase of expensive machinery and equipment makes it more necessary each year for sound management practices to be understood and followed. This is an area that should be emphasized more fully in day school, young farmer, and adult farmer classes. Teachers must be prepared to provide leadership in this field.

The use of scientific developments and new products on farms is helpful to bring about the revolution in farming. It is essential that these developments be fully understood and that instruction incorporate appropriate information that will enable the students to make right decisions and then to apply this information to their farming programs.

Educators Face Challenge

Dr. Stratton, President of Massachusetts Institute of Technology, said, "Half of what we know in science we have learned in the last ten years." This presents a tremendous challenge to all workers in agricultural education. A carefully planned teacher education program must be provided for those who are preparing to become instructors and more in-service training must be provided for teachers so that they may be kept up to date with the new developments. This is an area that must be continually studied and adapted to meet

the changing needs.

The dynamic changes that have been taking place in agriculture are making it increasingly necessary for farmers to be thoroughly educated. The increase in the use of science on the farm, the growth in agricultural technology including automation, and the increasing importance of management and marketing are helping create problems that call for agricultural technicians. This specialization is important on the farm as a part of large-scale farm operations.

Many jobs done of a technical nature are performed on the farm by farmers. Some are done on the farm by persons who live off the farm but work on the farm as needed. Soil technicians would fall in this category. Another group of agricultural technicians deal with agricultural problems in occupations in agriculture which are performed off the farm. These occupations include technicians in fertilizer sales and application, farm machinery, feeds and feeding, dairy technology, poultry technology, storage of farm products, and many others. Unfortunately there is little training available for such technicians.

There are approximately one-million migrant farm workers. Many of these work only a portion of the year. In 1957 the average annual income of these workers was \$892. This is a tragic situation. Instruction must be provided for these workers so that they have a satisfactory standard of living.

Related Areas Neglected

Vocational education in agriculture has been slow in providing instruction for certain areas of farming. The field of horticulture is inadequately served. This area should be studied so that the needed training may be provided. This training should be offered regardless of where the farms and the farming opportunities are located.

We know that a change is taking place in rural America in connection with farm workers. The occupational status of farm workers can be expected to improve in the years ahead. A farming program built around good management, science and technology will require well-trained farm workers. This training need is another challenge for vocational agriculture in the years ahead.

The reduction in the number of farmers points up the need for stronger farm leadership. This is one reason it is so essential to

continue the vigorous and influential organizations, the Future Farmers of America and the New Farmers of America. We must also give additional emphasis to the young farmer movement and provide encouragement and assistance to established farm organizations in developing rural leadership through their own programs for young farmers.

The changes that are taking place, many of which are misunderstood by the general public, make it most important for a new image to be developed of vocational agriculture.

These changes also have implications for training in the field of agricultural service occupations. I am referring to occupations on the farm and off the farm that deal with agriculture. This is an area that merits important consideration and planning in the months ahead.

At present it appears advisable to establish programs on an area basis as soon as possible to provide training in these important occupations. The vocational agriculture program can provide instruction that will serve as a firm foundation for those who will enter the related fields. We must develop a stronger cooperative relationship with other public vocational education programs as we serve this large occupational area.

Legislation Offers Help

Let us not forget that we may meet some of these needs through the Area Redevelopment program.

Doubtless many of you have heard of the Senate Bill, S. 1991, called the "Manpower Training Bill," which if passed will provide substantial increases and appropriations for vocational education. It is possible that these funds may be available for agricultural service occupations.

There is an urgent need for thorough program planning for technical training in agriculture on the post-high school level. This instruction may be provided in cooperation with area schools or community colleges.

I have covered too briefly many phases of training in agricultural education. I have not mentioned the need for general agriculture and for instruction in agriculture on the college level. These needs are closely related to instruction in vocational agriculture.

It is our intent and desire to work closely with all workers in agricultural education as

we strive to find additional solutions to the problems we face. In order to further promote sound program planning in agricultural education for the years ahead, I called to Washington a Consulting Committee in January to give us counsel concerning the direction we should go in the future expansion and development of programs in agricultural education.

This committee had as members representatives of supervisors, teacher educators, the AVA, and the National Association of Teachers of Vocational Agriculture. It is my hope that the recommendations of this consulting committee will help us to further develop sound programs of agricultural education on a nationwide basis. We will also use from time to time other consulting committees.

We are grateful for the assistance that is being given us in the fields of vocational agriculture by other groups. James Patton, president of the Farmers Union, has appointed a special commission to study the needs for agricultural education in the years ahead. It is our privilege to work closely with that commission.

As we review the changing rural America and the implications these changes have for vocational agriculture, we must admit that this is a period of challenge and of great opportunity for us. Let us take pride in the vocational agricultural programs. Let us recognize the training we offer for farming and of the needs that are being met by these programs. Let us help others to understand that vocational agriculture is excellent training for boys who wish to enroll in college.

Gain Public Support

We need also to let the public understand that the vocational agriculture program is the best training available for those who wish to enter occupations related to agriculture. Then let us not overlook the training in leadership, the pride in farming, and the inspiration that farm boys receive from taking part in vocational agriculture, including its student organizations, the FFA and the NFA.

As we serve as instructors, teacher educators, and as administrators in vocational agriculture, let's not forget that we are working for the improvement of the role of the American farmer. It is a privilege for us to be of service to him and his family. It is our hope that we will serve him well.