THIS PAPER STATES THAT A DISPROPORTIONATE EMPHASIS HAS BEEN PLACED ON COLLEGE-BOUND PROGRAMS, NEGLECTING VOCATIONAL EDUCATION IN THE RURAL SCHOOLS. THE FUTURE FARMERS OF AMERICA PROGRAMS APPEAR TO BE SUCCESSFUL DUE TO THE PROBLEM-SOLVING, WORK-EXPERIENCE APPROACH THAT BUILDS ON CLOSE WORKING RELATIONSHIPS AMONG THE HOME, THE SCHOOL, AND THE STUDENT. FOR RURAL BOYS, A MODERN VOCATIONAL AGRICULTURE PROGRAM IS SEEN AS THE BEST PREPARATION FOR USEFUL EMPLOYMENT. RECOMMENDATIONS INCLUDE EXPANSION OF PRESENT PROGRAMS, APPRENTICE-TYPE PROGRAMS IN AGRIBUSINESS, AND BETTER TEACHERS. (SF)
VOCATIONAL EDUCATION AT THE HIGH SCHOOL LEVEL

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ABSTRACT

Vocational education is a prime responsibility of the comprehensive high schools of America. Education for the world of work flourishes best where such schools are dedicated to providing educational opportunity for all the people. A true community school is equally sensitive to the needs of those who will remain in the community and those who will leave to seek their futures elsewhere. Adult education becomes an integral, not a peripheral, function.

The most glaring maladjustment of our high schools at present is the emphasis on college preparation at the expense of vocational and prevocational education. Eighty percent of the students presently in our public schools will not graduate from college. This describes one dimension of the task ahead.

The report of the President's Panel of Consultants on Vocational Education recommends that present vocational programs must be extended and improved, new programs must be initiated and a wider range of age and ability groups must be served. A six-state sample studied by the President's Panel in 1962-63 revealed that in rural communities less than half of the schools offered agriculture or home economics and industrial and distributive education were practically non-existent.

Vocational agriculture and home economics have been the most demonstrably successful vocational programs, especially in rural areas. A vocational agriculture program provides education for (1) adult farm people established in a farm business, (2) post-high school youth seeking entrance into farming or a farm-related occupation, and (3) high school students interested in farming or other agricultural careers. For the high school program, of which the Future Farmers of America is a significant part, the objectives are (1) to develop an understanding and appreciation of modern agriculture and rural life, (2) to develop leadership and citizenship, (3) to provide supervised work experience, (4) to make a beginning in an agricultural pursuit, and (5) to prepare for further study.

Boys coming through the vo-ag Future Farmers of America program have been exposed to sound preparation for the world of work. They bring to a job familiarity with work and a willingness to demonstrate it. They are the products of a farm background, problem-solving training, and an understanding of biological and mechanical principles. Of these there has never been a surplus.

In the immediate future care must be exercised that the critical need for vastly expanded vocational education in the cities is accomplished without detriment to the need for expanded and improved agriculture and home economics programs in rural America. Rural youth, the future producers of food, fiber and forest products for the world are the keys to lasting progress, not only for our rural areas, but for our cities as well.
Even the most casual observer of the present situation in the United States will conclude that we Americans are in the midst of another crisis. With only a modicum of insight our casual observer might well conclude that this crisis has three characteristics; (1) it is of our own making; (2) solutions are deceptively obvious and politically difficult of attainment; and (3) public education has a major role in any effort to ameliorate the difficulties that confront us.

THE COMMUNITY SCHOOL PHILOSOPHY

A review of history will suggest that the United States has a unique characteristic, one that has enabled us to survive and prosper in a hostile world. This characteristic is our system of universal public education. Our passion for unrestricted educational opportunity for all of our people, and indeed, for people everywhere has released creative capacity unmatched in the world's history. We are, so far as I can determine, the only people who have dedicated themselves to an educational system geared to the maximum development of each individual. To be sure, we have made mistakes, worshipped false gods, gone off on tangents, been subjected to violent criticism, and developed acute symptoms of withdrawal, but by and large United States, and particularly rural America, can be proud of its educational heritage.

Out of our efforts to provide educational opportunity for all has come the community school philosophy. This philosophy is the essence of conservative, practical America, which seeks to preserve those values of free opportunity which we all do, or should, cherish. In this philosophy administration is the servant of teaching, the school is a part of, not apart from, the community it is obliged to serve and from which it draws its support. The community school is characterized by an idea rather than by physical facilities, important as they are. In short, the community school is dedicated to the idea that all of the people in its service area have a claim on its educational resources to the end that they achieve their potential. The community school is equally sensitive to the educational needs of those who will remain in the community and those who leave. Adult education is accepted as an integral responsibility rather than a peripheral activity that might be shifted to other agencies.

ROLE OF VOCATIONAL EDUCATION

Where does vocational education for rural America find its proper niche in this kind of school system? The answer is readily available to anyone who cares to seek it. Eighty per cent of the students now in elementary and secondary schools will not complete college. Conversely, it is an observable phenomenon that the lion's share of our educational resources are devoted to alleged college preparatory work. This is perhaps our most glaring maladjustment. Fortunately it is amenable to correction. It is also fortunate that vocational education has been able to do a massive job to date with a minimum of resources.

Vocational education has a major role to play as our high schools bend their efforts toward preparation for the world of work. Present vocational programs must be extended and improved, new programs must be introduced, and a wider range
of ability and age groups must be taught. In the words of the President's Panel of Consultants on Vocational Education1/ this means vocational education for (1) youth in high school who are preparing to enter the labor market or to become homemakers; (2) youth with academic, socio-economic or other handicaps that prevent them from succeeding in the regular vocational education program; (3) youth and adults who have completed or left high school and are full-time students, preparing to enter the labor market; (4) youth and adults unemployed or at work who need training or retraining to achieve employment stability; as well as (5) services and facilities to assure quality in all vocational and technical education programs.

Translated into action, the Panel's recommendations have great significance for rural youth and their parents. Agriculture and home economics programs will be broadened and expanded, office training, distributive education and industrial education will be made more available.

The necessity for vocational education's increased role was dramatically revealed in a study reported by the President's Panel of Consultants2/ that showed industrial education to be available in only two per cent of the schools in communities under 2500 population and less than half of the schools offered agriculture or home economics. Distributive courses were practically non-existent.

NATURE AND PURPOSE OF VOCATIONAL EDUCATION IN RURAL SCHOOLS

The vast rural areas of the United States have not been adequately served by vocational education. To suggest that rural youth have been given proportionately greater vocational educational opportunities than their urban cousins in no way improves the situation. Nevertheless, vocational agriculture and home economics, although available in less than one-half of the high schools in small communities, have been the most demonstrably successful vocational education programs in the entire country. A brief description of one such program may be helpful in evaluating future needs.

VOCATIONAL AGRICULTURE

The vocational agriculture program has developed over the past half century to its present state. More than 600,000 individuals are enrolled in programs of systematic instruction. Its overall purpose is to provide educational opportunity in agriculture through the public schools. This is achieved through a series of mutually exclusive, but closely allied phases.

ADULT EDUCATION IN AGRICULTURE

About one third of the enrollment in vocational agriculture nationally is composed of adult farmers and their wives. In Minnesota, my home state, adult enrollment is about one-half of the total. The objective of adult education in
agriculture is to increase the efficiency of the farm business operation and raise the level of living.

Adult education in agriculture is geared to aid farm operators in solving the management problems involved in modern farming. The basic problem of farming is adjustment to changing conditions, most of them economic. It is natural, then, that farm management and business analysis provide the vehicle for most effective teaching. The decisions farm operators must make are rooted in the economics of management. The instructional program, therefore, must have a similar origin if it is to be truly and effectively helpful.

A three year course of study for farm operators (and their wives) has been developed and is proving successful. The first year is principally devoted to teaching the techniques of keeping an accurate and complete set of accounts, analyzing the present situation, establishing preliminary family goals, and using the farm records and accounts in decision making. During the second year major emphasis is given to farm business analysis, revision of goals, and identifying the strong and weak points of the present farm business organization. The third year is pointed toward improving the farm business organization. With two years of actual farm record analysis at hand a farm operator begins to gain an understanding of his business that can be gained in no other way. This program calls for about 15 class sessions per year supplemented by individual on-farm instruction throughout.

In addition to the farm management and business analysis instruction, units are offered each year in mechanized agriculture and farm mechanics and in the important crop and livestock enterprises. These may vary from a short intensive tractor clinic to a series of lessons on grain marketing or quality milk production.

Thus the adult education program attempts to aid the farm operator in developing an understanding of prices and price relationships and more effective control over such factors as size of business, combination of enterprises, labor efficiency, rates of production, and cost control. These are the major factors influencing profits from a farming business.

The need for this type of education in agriculture is dramatically demonstrated by the fact that in any group of farms in the same community, operating under similar conditions of weather, type of farming, government programs, general soil type, and price relationships there will be in any year a wide, sometimes almost unbelievable, range in earnings. This is due largely to variations in management. Good management depends on an intimate knowledge of the business which is available only through farm records and accounts. The number of farm operators who make must decisions based on inadequate knowledge of their businesses is all too large. It is estimated that less than 10 per cent of the farm operators know their returns per hour of labor; returns per $100 of feed fed to livestock; costs of producing a unit of livestock or grain; relative net profits of the various enterprises; and cost per acre or per production unit of feed grains, cash crops, and forage; or cost per hour or per acre of machinery, fertilizer, and capital. Without such information an operator of a farm business is working
A sound adult education program will provide the opportunity for better farm business management, higher farm income, and an enriched level of living.

EDUCATION FOR POST-HIGH SCHOOL YOUTH

In every community there are young men and women who, having terminated or completed their high school education, are seeking economic self-sufficiency. Some of these people will leave the community to further their education or seek employment. Others will choose to remain in the community. It is this latter group that the post-high school program is designed to serve. From this group will come the local leaders, taxpayers, lawmakers and heads of families in the community. A vocational agriculture program that fails to recognize the specific educational needs of these young people is, in my opinion, derelict in its duties.

In agricultural education such a program is pointed towards the rural post-high school youth. For lack of a more appropriate designation it has come to be known as Young Farmer Education. Its purpose is to aid in occupational establishment and personal adjustment to adult responsibilities and opportunities in the field of agriculture. The specific objectives, as presently spelled out by the Minnesota Young Farmer Development Committee, may be stated as follows:

1. To provide an inventory of opportunities in farming and other agricultural occupations in the community.

2. To develop a roster of post-high school youth interested in establishment in farming or other agricultural business.

3. To coordinate community resources in education credit and financial management to the end that adequate capital is made available to young farmers on a mutually beneficial basis.

4. To provide an educational program on an organized, systematic basis that will:

   (a) develop leadership and citizenship

   (b) provide qualified students with information relative to requirements for entrance into farming or other agricultural occupations

   (c) permit students to assess their resources and qualifications against the entrance requirements of agricultural occupations

   (d) develop the skills, attitudes, and knowledge necessary for successful occupational establishment.

   (e) develop individual goals and programs of work
These objectives are achieved through instruction organized around three main headings. They are:

1. The economic-vocational area of instruction.
2. The socio-civic area of instruction.
3. Individual counselling and on-farm instruction.

Examples of lesson topics in the economic-vocational area include land judging, farm appraisal, records and accounts, crop and livestock management, occupational opportunities and requirements in agriculture, management, marketing, taxes, credit, the mechanization of agriculture, leases and partnerships.

The socio-civic area of instruction will deal with such topics as organizing a Young Farmers Association, legal aspects of farming, local and state government, administration of the public school system, community services, responsibilities of rural leadership and citizenship.

Individual counselling and on-farm instruction is designed to accomplish those objectives that must be attacked or approached on a personal basis for most effective results. Here is where individual aspirations are explored, goals established and specific work programs are developed and checked in detail.

The Young Farmer Program serves rural youth at a crucial time in their lives. This is a most strategic group so far as the local community is concerned for it is during this period when the most significant decisions of a lifetime are made.

**HIGH SCHOOL FFA EDUCATION**

Instruction for high school students is perhaps the most widely known phase of vocational agriculture in the United States for the obvious reasons of ease of administration and adaptability to traditional school philosophy. The Future Farmers of America, the largest organization of farm boys in the world, has proved to be the most effective vehicle for teaching.

Specifically the high school FFA program has five major desired outcomes or objectives. They are:

1. To develop an appreciation and understanding of modern agriculture and rural life.
2. To develop citizenship and leadership.
3. To provide supervised work experience in agriculture at the operational and managerial levels.
4. To make a beginning in an agricultural pursuit commensurate with individual capacity, interest, and opportunity.
5. To prepare for further study in agriculture at the vocational-technical or collegiate level.

Since the inception of this program in the early 1900's it has enjoyed steady growth and development. The most rapid expansion has taken place since the close of World War II hostilities.

In general, the instructional program emphasizes the exploratory and introductory phases during the first year with increasing specialization and depth as the student progresses through the program. Management, conservation, safety, mechanized agriculture and farm mechanics, enterprise analysis, public speaking, parliamentary procedure, and the application of the principles of biological science to crop and livestock production are stressed throughout. Each student develops and carries out a program of supervised work experience in agriculture. The planning is done cooperatively by the student, the teacher, and the parents. Students are engaged in these "work experience" or "supervised farming" programs all year round and year after year until they finish high school and become eligible for the Young Farmers Program or leave the community for further enterprise elsewhere. Some of the desirable features of supervised work experience programs in agriculture can be described as follows:

1. Theory and practice occur together.
2. They are large enough to make the labor, management, and capital invested worthwhile.
3. They are adapted to the individuals' home situation, agricultural experience, and to the community.
4. They provide experience in both operation and management as well as partnership and ownership opportunities.
5. They have continuity from year to year.
6. They expand as the program develops.

The total program of classroom instruction, shop, laboratory and library experience; Future Farmers of America leadership development; and on-farm instruction and counselling is coordinated by the instructors in annual plans of work and instruction. The basic method of teaching follows the procedures of science. There are four steps in the basic teaching method which can be described briefly as follows:

Step 1. Analyzing the present situation in terms of the student's opportunities, aspirations, interests, aptitudes, and home situation.

Step 2. Establishing goals based on realistic analysis.

Step 3. Executing a plan of procedure to reach the immediate and long range goals.
Step 4. Periodic evaluation to measure progress and provide a basis for revision of goals and plans of procedure.

From the student's point of view this may be summarized by four questions: (1) Where am I? (2) Where am I going? (3) How do I get there? and (4) How am I doing?

PREPARING RURAL YOUTH FOR EMPLOYMENT

From the viewpoint of a school administrator this program has merit as it increases the holding power of the school. For those concerned with agricultural education at the college level it is significant that half of the students in the College of Agriculture in Minnesota came to the College through vocational agriculture.

With employers in nonfarm agricultural occupations the vocational agriculture program apparently enjoys high repute. There are numerous instances where young men with a background of Future Farmers of America experience and training are subject to diligent recruitment. The reasons for this are obvious. These boys have been exposed to sound preparation for the world of work. They bring to a job a familiarity with work and a willingness to demonstrate it. They are able to accept responsibility. They are the products of a happy combination of circumstances that provide a farm background, problem-solving training, and an understanding of biological and mechanical principles. They are, in fact, the cream of the farm crop and represent an area in which there has never been a surplus.

The original purpose of vocational agriculture was to train qualified and interested people for proficiency in farming. This has always included present, prospective, and future farmers. Over the years the perspective has broadened as agriculture itself has broadened and grown. What happens to boys who complete the vocational agriculture curriculum in our public high schools?

The answer to this question will not be the same in Maine as in Minnesota; nor will it be identical in the suburban areas of a state as in the rural areas. However, the evidence will permit some general observations and those voiced here will apply to the mid-western area of the United States.

Only about a third of the people starting farming in the past 10 years have had any vocational agriculture. About a third to a half of the vocational agriculture graduates enter farming while another 15 to 25 per cent enter related agricultural occupations. We are not training enough farmer replacements nor are we providing sufficient people to enter the nonfarm agricultural careers. So it is a fair observation that the public schools have not done enough in this aspect of public educational responsibility. It is also apparent that the products of vocational agriculture have their choice of careers. The lads who complete vocational agriculture in high school have plenty to sell and the demand is high. Generally they do not contribute to urban unemployment upon migration to cities nor are they among those who illustrate the plight of the functional
or a rural illiterate who is displaced by a tractor and migrates to the city looking for work. The farm boy who migrates to the city and cannot compete for a good job is not the FFA boy with three or four years of vocational agriculture. He is more apt to be a high school dropout or the victim of a rural community school that failed to include vocational agriculture in its course offerings. The record of vocational agriculture in preparing people to be employable is a commendable one; the need now is for more and better programs of this kind.

RELATIONSHIP OF VOCATIONAL AGRICULTURE TO OTHER VOCATIONAL EDUCATION

Much has been said about vocational education in recent months. In fact, vocational education seems to have replaced life adjustment and reading as the whipping boy of public education. It has become common practice to lump all federally reimbursed vocational programs into one category and to speak and write glibly about the subject. In cold fact, the various programs of vocational education are different in as many ways as they are alike. To be sure there is a common dedication to training for useful work in the homes, factories, offices, industries, businesses, and on the farms of America. The principles basic to this philosophy are shared by all. Yet the programs are quite different in operation.

Trade and industrial occupation, for example, prepares people to perform specific skills in specific occupations such as drill press operators or typesetters. To date trade and industrial education is largely a post-high school program. Distributive occupations zero in on sales and service jobs within specific job classifications. Home economics education treats the basic occupation of homemaking as a vocation in itself and rightly so. The only training in budgeting, household accounting, child care and home management most modern brides get is their high school home economics course. Industrial arts has professed a general education classification and denies vocational purpose, yet it has inherent vocational outcomes that cannot be denied.

Vocational agriculture, in common with all sound vocational education, has insisted always that theory and practice occur together in training people of all ages with a concern in agriculture. It shares with trade and industrial education a major responsibility for adult education. It likewise has an integral role in the high school curricula. Every high school student of vocational agriculture carries out a program of supervised work experience, usually called a supervised farming program and normally conducted on the home farm in cooperation with his parents and teacher. Thus, close working relationships between the home and the school, among the boy, his parents and teacher are the sine qua non of vocational agriculture and constitute its most distinguishing characteristic. Such a learning-teaching situation enhances the opportunity and responsibility for effective and realistic guidance which has been a hallmark of vocational agriculture through the years. The motto of the Future Farmers of America "learning to do, doing to learn, earning to live, living to serve" is not a collection of idle phrases; it is a living reality.

Likewise the creed of the FFA has permeated the learning-teaching process. It is perhaps the most eloquent statement of the vocational agriculture philosophy.
and explains much of the value of this program over and beyond the strictly vocational virtues.

It says: "I believe in the future of farming, with a faith born not of words but of deeds -- achievements won by the present and past generations of farmers; in the promise of better days through better ways, even as the better things we now enjoy have come up to us from the struggles of former years.

"I believe that to live and work on a good farm is pleasant as well as challenging; for I know the joys and discomforts of farm life and hold an inborn fondness for those associations which, even in hours of discouragement, I cannot deny.

"I believe in leadership from ourselves and respect from others. I believe in my own ability to work efficiently and think clearly, with such knowledge and skill as I can secure, and in the ability of organized farmers to serve our own and the public interest in marketing the product of our toil. I believe we can safeguard those rights against practices and policies that are unfair.

"I believe in less dependence on begging and more power in bargaining; in the life abundant and enough honest wealth to help make it so -- for others as well as myself; in less need for charity and more of it when needed; in being happy myself and playing square with those whose happiness depends upon me.

"I believe that rural America can and will hold true to the best traditions in our national life and that I can exert an influence in my home and community which will stand solid for my part in that inspiring task."

Much has been said in recent months about the population shifts and the decimation of the farm population. Certain writers and speakers seem to have suddenly discovered a trend from farm to city that has been going on since the industrial revolution. At the same time there have been suggestions that the farm youth is poorly trained to compete with his city-born counterpart for jobs. All this may be true, but like the book "Tobacco Road" it lacks a lot of being the whole truth.

It has been suggested in certain quarters that because of the trend toward larger, higher capitalized farm businesses and the subsequent reduction in the number of persons required to operate them that there should be a corresponding reduction in vocational agriculture programs. This is not only ridiculous, but dangerous. The trend toward fewer and larger business units in agriculture is in harmony with the general trend in other businesses, industries, and indeed, in school districts. It is a function of technology and is not to be deplored except insofar as educational opportunity has failed to keep pace. Shall we conclude that because we now have fewer school administrative units we should give less emphasis to training school superintendents? We have fewer airlines, fewer retail grocery companies, fewer bank corporations now than we had a few years ago, but this trend toward mergers and consolidation of units seems a poor reason for withdrawing educational resources. Statements have been made, however, recommending that this be done in vocational agriculture in order to
increase support of other valuable vocational programs. Such reasoning seems to imply that robbing Peter to pay Paul will raise the average.

It is statistically possible to project the trend in declining farm population and name the year in which there will be no more farms. The same kind of projection can be made statistically to show that the advancing average age of farm operators will one day result in century-old farmers. I fear that too many of the recent rash of statements about vocational agriculture have relied on this type of analysis.

For rural boys, and particularly farm boys, it is difficult to visualize a program that will do more to prepare them for useful employment than modern, forward-looking vocational agriculture. This program matches environment and education; teaches commitment to work; provides opportunity to earn, save and invest; and encourages self-reliance.

NEEDED PROGRAMS

Testimony presented to both the House of Representatives and the Senate of the United States indicates that responsible leaders of vocational education are unanimous in their judgment. They have recommended that present programs be broadened and expanded, that new programs in such areas as office occupations be included in the cooperatively supported federal-state-local programs, and that area vocational schools play a larger role in vocational education.

In this emerging pattern two specific developments seem certain. First, home economics instruction will greatly extend its training program for gainful occupations involving home economics skills and knowledge. Shopping services for residents of rest homes, buyers aides, home care, substitute mothers for working wives with small children, and the whole range of food services illustrate the types of training to be given added special attention.

Second, vocational agriculture will move to give special attention to the so-called agribusiness occupations and at the same time greatly step up adult education using the farm business analysis approach. A third development in vocational agriculture will see the process by which qualified young men become established in farming and related agricultural occupations receiving intensive study. Apprentice-type programs in agribusiness occupations will operate side by side with the present supervised farming programs. The high school classes and the Future Farmers of America will continue to play a major role in introducing young men to the wide and wonderful world of modern agriculture.

Home economics and agriculture will likely continue to be the dominant vocational programs for rural America. This is as it should be. Homemaking and home economics occupations are basic to strong family units. Farming is now, and will continue to be the largest single entrepreneurial opportunity in most of the United States and certainly in rural America. In the welter of change it must be remembered that agribusiness depends on a system of well managed profitable family farms. Without well trained farm operators the entire
structure of agribusiness will come down like a house of cards.

In the immediate future the need for more and better vocational education will be greater in cities than in rural areas. The cities are in crisis. Care must be exercised that this need is met without prejudice to the continuing need for expanded vocational education in the broad reaches of rural America. Rural youth, the future producers of food, fiber and forest products for the world, are the keys to lasting progress, not only for rural areas, but for our cities as well.

No vocational education program can succeed without carefully selected and well prepared teachers. This is a function and responsibility of colleges and universities, especially land grant institutions and state universities. They are the fountainhead of the professional growth and development of teachers, supervisors, and administrators. In them resides also the primary responsibility for research and for its interpretation and dissemination. Vocational education departments in higher education institutions must be more than a contractual relationship with State Boards for Vocational Education. Theirs is the responsibility, in large measure, for developing vocational education for rural America as a discipline worthy of the respect of all by virtue of its merit and the dignity of useful work.
FOOTNOTES


2/ Ibid., p. 11.