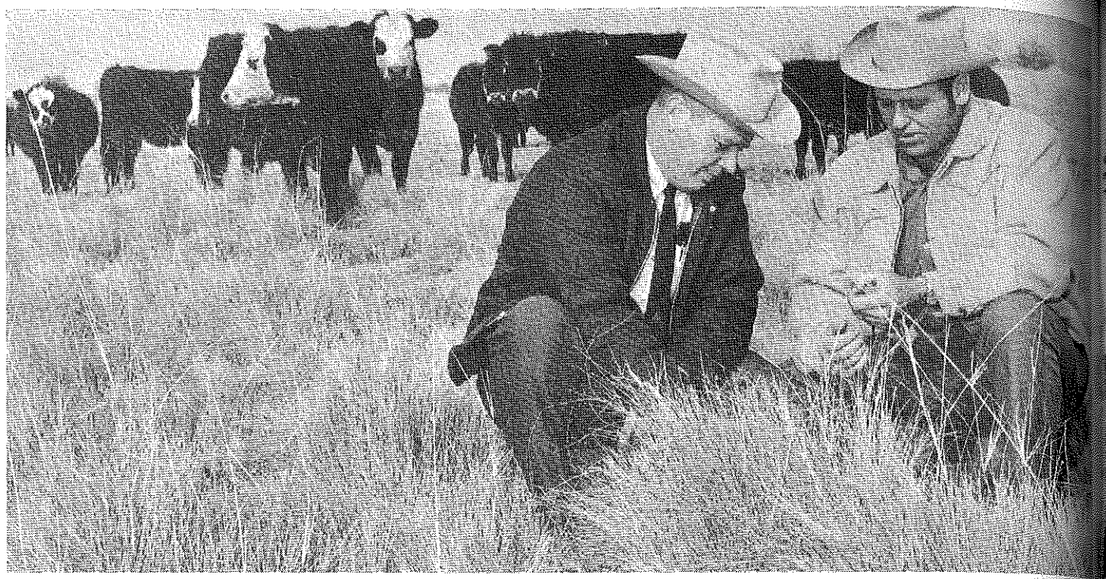
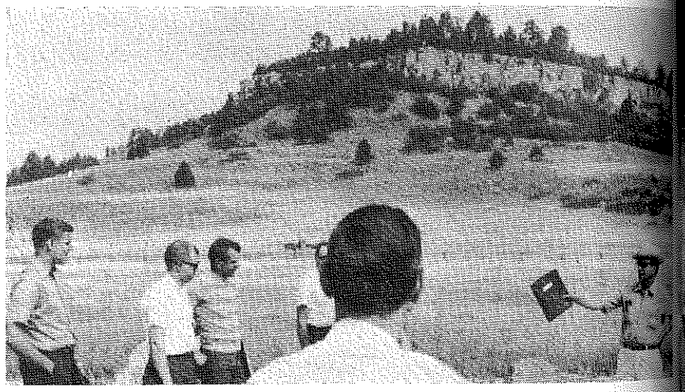


A former vocational agriculture student who has been established in farming for the past 15 years in the Hennessey, Oklahoma community is visited by a state vocational agriculture staff member. Earl Marshall is president of the Young Farmer Association of Oklahoma. Donald D. Brown is district vo-ag supervisor and consultant to the Young Farmer Organization in Oklahoma. (Photo by Robert Price, Oklahoma State University)

Stories in Pictures

ROBERT W. WALKER
University of Illinois



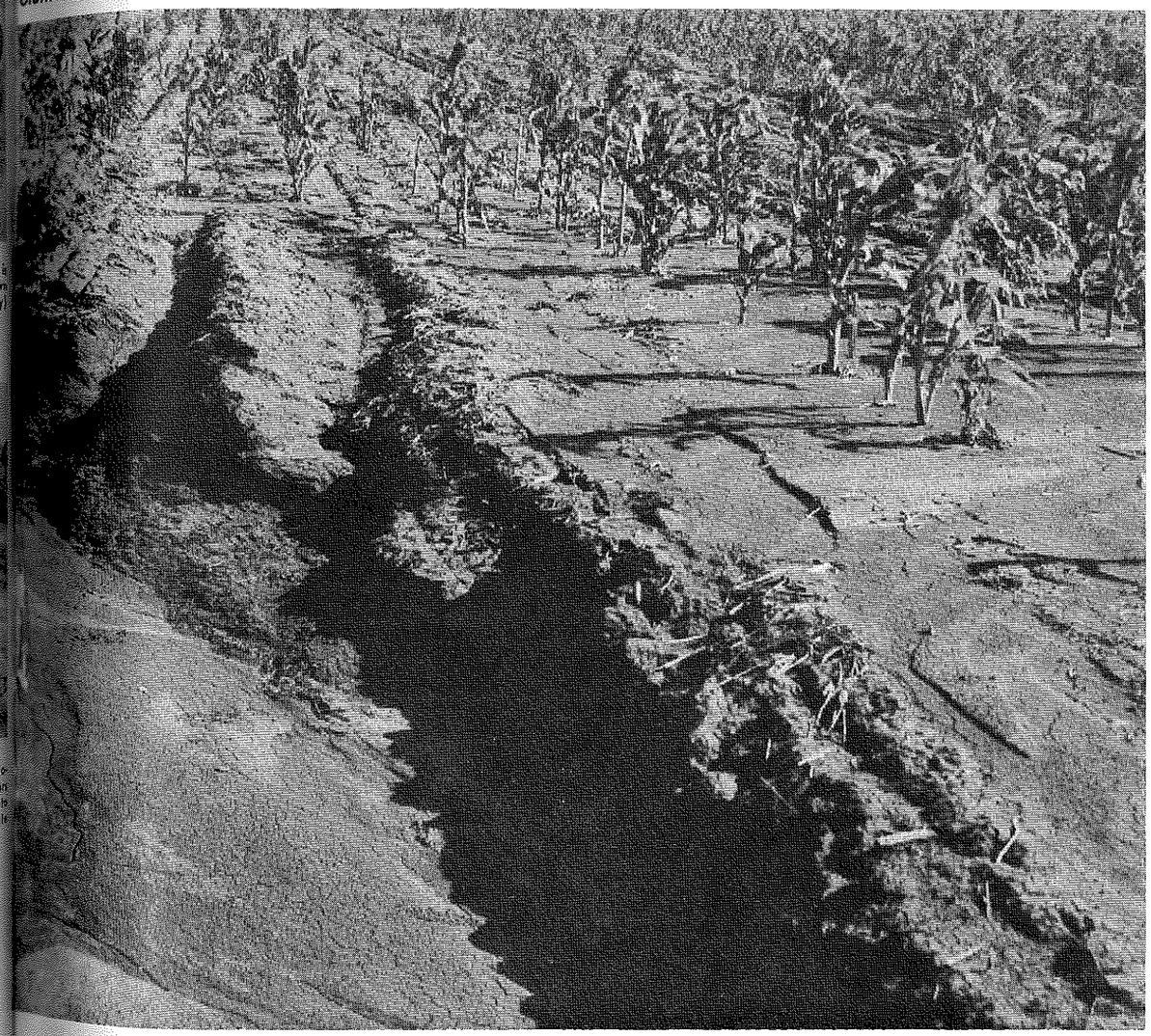
A range management tour was part of the program at the South Dakota Agriculture Teachers Annual Conference, August 3-6, 1970. (Photo above by H. W. Gadda, South Dakota State University)

Floriculture students learn disbudding and staking of potted chrysanthemums from their high school instructor, C. C. Beam, Herndon, Virginia. (Photo left by C. C. Beam)

AGRICULTURAL EDUCATION

olume 43 April, 1971 Number 10

Agricultural Education



The
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COVER PICTURE

Poverty of the land contributes to poverty of the people. Low incomes create many of the problems of the disadvantaged — poor schools, poor housing, inadequate nutrition and lack of money to correct some physical disabilities.

WHO IS DISADVANTAGED?


Harry W. Kitts

Disadvantaged — handicapped; unfavorable condition or circumstance. As I listen to reports at conferences, and read articles such as included in this issue, that describe programs being offered I wonder what would be the results if equal efforts were applied to all phases of the program of instruction in vocational agriculture. I am concerned about the possibility that too much emphasis will be given to programs for the disadvantaged (as though that is possible) at the expense of the remainder of the program. If a teacher aide is needed to assist the vocational agriculture instructor with 12 students in a separate class for the disadvantaged, why not have 3 teacher aides to work with the instructor and the 54 students in the regular, all-day program plus the young and adult farmer classes? What is the justification for a minimum of one 2-hour on-farm instructional visit per month to the disadvantaged youth if the instructor makes only 3 on-farm visits in a year to the so-called 'regular' student? If the class periods in the high school are 1 hour in length why should the instructional time for those in the disadvantaged group be lengthened if research tells us that the interest span of many of these individuals is more limited than that of other students? Do the returns, now and later, justify the economic expenses of the additional supervision and individual attention?

Has research proven that accomplishments are greater if the disadvantaged are segregated in a class by themselves? Are there administrative or legal requirements that the groups must be divided and the disadvantaged removed from the regular classes? What happened to the concept of individualized instruction in our vocational agriculture classes? Some research has suggested that greater motivation was achieved by heterogeneous grouping when the instructor provided differential assignments, individual planning, establishment of individual goals and evaluative criteria than by separating classes into homogeneous groups of low, average and high achievers.

I consider the need to emphasize the plight of the low achiever, regardless of the cause, as an indictment of teaching methods and classroom management too frequently geared to the average, or above average, student. Some teachers of agriculture have spent a disproportionate amount of time with the student of high mental achievement preparing for college entrance or the youth from an excellent home environment with the potential of achieving recognition as an American Farmer, breeder and exhibitor of prize livestock, or recognition for judging, speaking or leadership ability. The need to direct attention to a neglected segment of the group we serve was necessary.

Let's not devote so much time or resources to the disadvantaged that other segments of our program become disadvantaged. Plan your work and work your plan to serve all students and all segments of your program. It is accepted that we could do a better job of instruction with fewer students per class, more instructors and assistants, better physical facilities and additional instructional aids. The entire vocational program could be improved if funds were available for more personnel and instructional materials. Let's organize what we have available to the best of our ability and strive to acquire more funds and personnel to improve the entire program so no one will be disadvantaged.

GUEST EDITORIAL

AGRICULTURAL EDUCATION FOR THE DISADVANTAGED

Denver B. Hutson, Professor and Head
Department of Vocational Teacher Education
University of Arkansas, Fayetteville, Arkansas

A substantial segment of the population in America, because of educational, health, social, or other deficiencies, has been unable to share the standard of living which the nation as a whole enjoys. Efforts are being made to reach and to serve these people in order that they may move into

the mainstream of economic and social life. Vocational education has a mandate to assist the disadvantaged to achieve a useful and productive place in society.

The term "disadvantaged" has been in the limelight in recent years and has been the subject of much discussion. Books and special issues of educational journals have been devoted to this topic. However, we, in agricultural education, are challenged to go beyond discussion; we must act. We cannot be all things to all people, but we must assume a role that will reflect our sensitivity to the needs and anxieties of youth and adults of this country. Historically, agricultural education has been concerned with youth who have had limited access to success and recognition.

Studies concerning disadvantaged students reveal characteristics common for learning as well as social, cultural, ethnic, and economic characteristics. These findings have implications for vocational education as well as for all aspects of education. A few basic points in research have demonstrated effective practices in assisting the disadvantaged which have significance for agricultural education.

First, *the teacher holds the key to success.* He may possess knowledge of modern educational technology, understand the psychological theories of learning, and have at his command a full bag of tricks, but unless he honestly cares about students as persons, little may be accomplished in dealing with the problems, educational or otherwise, of the disadvantaged. Recognized hallmarks of vocational agriculture are the success stories of students, who at some particular time in their lives felt "left outside" by the educational establishment, refused to become dropouts, but because of some recognition, approval or reward by a teacher, discovered that education has meaning and can lead to a successful career.

I find it appropriate to relate a story of an essay contest in which students were asked to write on the subject, "Why I Like My Teacher." The winner of the contest wrote one sentence: "I like my teacher because he makes me feel like somebody." Thousands of testimonials have been voiced by former students to the effect that much of their success was due to the fact that once they had a vo-ag teacher who made them feel like somebody, who permitted them to participate and achieve in a contest, win an award for producting a prize animal, or was a teacher friend who visited in the home. Honestly caring about people is a requisite in reaching the disadvantaged.

Secondly, to reach the disadvantaged *a means of communication must be established.* Communication involves three elements: a sender, a receiver, and a message. If it is to be effective, the message must be clearly understood by both the sender (teacher) and the receiver (student). One of the principles of educational theory overlooked so easily, is that we must begin where the student is in his educational experience or achievement; that is, we must establish a "hitching post" before further learning will be meaningful and acceptable. We must keep in mind that the message to be communicated will be effective only to the extent there is proper linkage between the sender and receiver.

Thirdly, *good teaching is dependent upon appropriate methodology.* In agricultural education we view the role of the teacher as a manager of learning. Since the early days of the program, we have observed educational practices that were based upon what is currently referred to as "differentiation." We provided for individual differences among students through activities that may appropriately be labeled "differentiated assignments", "differentiated methodology," "differentiated instructional materials", and "differentiated evaluation." Instruction in vocational agriculture must focus upon the problems, interests, background, abilities, and level of achievement of each student. We utilize students to teach other students, with educational gain for both; adapt instructional materials to abilities of students; and evaluate achievement based upon progress of each individual rather than upon total achievement or some norm established by a class or set by a teacher. Methodology which permits approval and reward has as much relevance in dealing with the disadvantaged of the 1970's as it has had at anytime in the history of education.

A fourth point is *expectations.* In agricultural education we cannot overlook expectations which we have for the disadvantaged, neither can we overlook the expectations they may have for themselves. If teachers expect failure, failure may be achieved; thus, failure conditions students to expect failure. Motivation is associated with success. A real challenge to agricultural education is — how can teachers direct students, particularly the disadvantaged, into success experiences?

A fifth point has to do with *the relevance of curriculum and course content.* This is closely related to the points already mentioned, but it is important enough for re-emphasis. What makes curriculum content relevant? How can we enable students to see a relationship between what they are asked to "learn" and their own daily lives and aspired futures? To answer these questions suggests there be meaning and relevance to the content of instruction.

The "home project" as provided in the Smith-Hughes Act of 1917 offered a challenge for relevance in agricultural education. In later years the term "supervised farming" extended the concept of relevance to provide for a comprehensive laboratory experience for the instructional program. It was through the varied types of activities of this approach to teaching that permitted, even required, the instructional content to be differentiated, based on the interest, problems and goals of students. Occupational experience, whether it be a home project, a simulated project, or other experience which provides realism to the learner, offers a practical solution for agricultural education in response to the mandate of the National Advisory Council on Vocational Education — "A concern for directing the disadvantaged into the mainstream of vocational and technical education . . ."

The disadvantaged should not be viewed as "second-class citizens who cannot make it in the mainstream." Agricultural education is capable of responding in a positive and effective manner to the challenge of linking efforts with others in dealing with the problems of the disadvantaged. To accept this as a challenge means that we in agricultural education, working with programs directed to improve the lot of the disadvantaged, must expect success.

PRACTICAL AGRICULTURE FOR DISADVANTAGED YOUTH

Grant Fettig
Vocational Agriculture Instructor
Grant, Michigan

The 1968 vocational amendments placed much emphasis on vocational education for disadvantaged youth. The disadvantaged youth is not new to the Vo-Ag instructor. Over the years the Vo-Ag programs have been instrumental in helping many of these youth. However, with increased attention which may include increased financial assistance to local districts, a better job can and should be done for these youths.

In Grant, Michigan, a program started in February, 1970, was designed to provide disadvantaged youth with the opportunity to overcome handicaps and acquire agricultural employment skills. A nine member citizens advisory committee was instrumental in the planning and development of the program and is involved in the evaluation of it.

The activities of the class center around the seventy-eight acre school farm adjacent to the school. The farm has a barn for various livestock projects and other buildings are used for machinery and tool storage. A cropping program has been developed and is being implemented on the tillable land. Christmas trees are being planted on part of the farm not suitable to cultivation. A nature trail is being developed on a twelve acre woodlot on the farm.

Proposed Program

Research has shown that experiencing activities is one of the best methods of learning. Effort must be made by schools to provide work experience as a vehicle of learning for those students who do not readily adapt to the conventional learning situation.

At Grant, we find that the student who does not adapt to the conventional classroom situation may display an academic, socio-economic, cultural or other handicap.

The characteristics which makes this program different from most conventional programs are:

1. **Teaches specific skills which could be used in gainful employment.**
2. **Provides opportunity for students to develop responsibility, cooperation, interest in learning, and pride in their work.**
3. **Provides opportunity to develop work habits.**
4. **Two-hour class periods in contrast to one-hour periods.**
5. **A maximum of fifteen students in a class in contrast to the present twenty to thirty-five students in Vo-Ag classes.**
6. **Employment of an aide to assist with supervision of students.**

The Agriculture Program

During the freshman year, the student is enrolled in an exploratory agriculture course, such as applied animal science, applied soil science or applied plant science. This gives the agriculture instructor a year of exposure to the student which aids in selecting students for the practical agriculture course.

A student spends two hours in agriculture during his sophomore year. The Practical Agriculture I course outline serves as a guide for his activities for the first year. The following year the student follows the course outline for the Practical Agriculture II course. Many of the activities are similar to those which they completed the previous year, but, the students are expected to become more skillful and demonstrate more responsibility in performing the skills. It is planned that those students exhibiting work competence will be placed on a farm or agri-business, on a cooperative education or work study program during their senior year. At that time they may enroll in one of the regular semester vocational agriculture classes if this does not interfere with their work and graduation requirements. Whether or not the student is enrolled in a Vo-Ag class, he still will be considered to be in the Vo-Ag program; and, the Vo-Ag instructor will provide coordination between student, school, and employer.

Students are encouraged to participate in the activities of the Grant FFA. They have their own officers, hold meetings, and have the opportunity to participate in FFA Livestock cooperative projects of their own.

The Aide

An aide, hired to assist the Vo-Ag teacher in this program, was selected with the following qualities: Patience, desire to work with this type of student, practical knowledge of agriculture, mechanically inclined, responsible, and innovative.

This person performs the following duties:

1. **Assist the vo-ag instructor in preparing for classroom presentations. This could include ordering materials, helping with audiovisual materials, assisting in demonstrations.**
2. **Assist in arranging for field trips and field experiences.**
3. **Assume major responsibility for providing supervision during the periods that the students are not in the classroom.**
4. **Assume major responsibility in supervision of routine chores at school farm.**
5. **Do activities of an aide applicable to this program as defined by the Teacher-Aide Handbook of Grant Public Schools.**
6. **Assist the instructor in evaluating students and the program.**

Vern Rollston, teacher aide, helps Luis Rodriquez with one of the fifteen steers on the school farm. Other livestock enterprises include hogs, broilers and sheep.

At the present time a retired dairy farmer is employed in this position by the school. He is doing an excellent job in this capacity. It is our feeling that the person employed in this position will be a key to the success or failure of the entire program.

Guidance

Guidance is an integral part of this program. The school guidance counselor and vo-ag instructor work cooperatively on this aspect of the program. The counselor helps direct needy students toward this program and interviews each student during the spring, discussing progress in the program, progress in making a vocational choice, and in any other concern either party may have. Additional conferences are held when necessary.

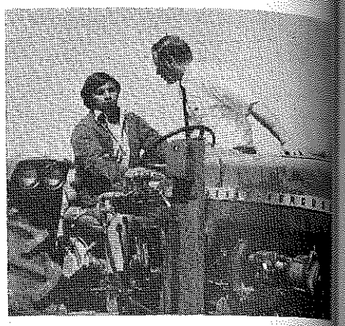
Summer Program

Five of the students are selected to work at the school farm and forest during the summer months. The students selected are those who exhibit the greatest need for additional training in skills and experiences that would be available during the summer months. It is assumed that these students probably would not be employed during the summer if this opportunity was not available. Students are paid for working and receive one unit of high school credit in agriculture for the summer program. The aide has the primary responsibility for supervising the students during the summer. During the summer of 1970, a senior agricultural education major from Michigan State University was employed forty hours per week to supervise the students. In addition to the help provided for the students, this experience was beneficial to the professional preparation of this vocational agriculture teacher.

Funding

Twenty per cent of the finances for the program came from local sources while eighty per cent came from vocational education funds. The budget items in the proposal included the purchase of farm machinery, salary of the teacher aide, salary of the vo-ag instructor for one hour per day, and the purchase of miscellaneous hand tools.

The program has been in operation for one year. For the most part, the enthusiasm and successes of the students have been encouraging. The practical agricultural program as described is an important part of the total vo-ag program and contributes to the total program.



Grant Fettig, vocational agriculture instructor, instructs Jessie Abrego in safe tractor operation. Fifteen acres of corn were planted and harvested by the students.

PRIVILEGED WITH GOOD TEACHING OR DISADVANTAGED BY POOR TEACHING?

Donald Priebe, Chairman
Department of Agricultural Education
North Dakota State University

Which is to be? Will students be **privileged** as a result of good teaching or will they be **disadvantaged** because of poor teaching? Upon the answer to this question hinges a significant part of the future of the lives of our students.

The disadvantaged student has been the object of concern, study and federal legislation. Attempts have been made to improve educational opportunity and build success patterns for the disadvantaged. This effort has not proceeded without problems. One paramount problem has been the need to define the disadvantaged and to identify those reasons or conditions which have resulted in being disadvantaged.

Many reasons, or qualifications, for being disadvantaged advanced include social isolation, academic insufficiency, poverty and disturbed family relationships. This article will examine the quality level of our teaching.

SELF WORTH CONCEPT

For good mental health, for success in school, for social success each person — boy or girl, man or woman — must feel, 'I am worthwhile: I count for something in this world, too.' The boy or girl must feel that he or she is important — a person of worth. Each person needs a feeling of acceptance and of self-esteem.

We know what kinds of behavior often follow when this concept is not present. Vandalism, crime, and suicides are stern reminders of something that has gone amiss.

Too often teachers and others have reinforced a negative concept. Basically the child says to himself, "Teachers parents and peers keep telling me I am a failure, so I must be." Eventually the child is likely to assume and play the assigned role of failure. Each person — boy or girl, man or woman — must have dignity, such as that afforded by:

a) Respect from teachers
b) Respect from peers
c) Good grooming
d) Decent clothes
e) A measure of success socially and in school.

To develop this concept of self-worth we must develop success patterns for students.

SUCCESS PATTERNS

Disadvantaged students may not have "success patterns", but "failure patterns." *So much* of what they do turns out wrong.

We must provide a setting in which success is: 1) *possible,* 2) *easily achieved,* and 3) *is repeatable!* We need to start with possibilities for success and build on a progression of many successes.

Success breeds success and the building process begins! But — *early, very early,* success is crucial. Early and continued failure tends to lock the student into a failure cycle. We must help the student find the successes which will break this depressing cycle of failure.

If success is to continue in a desirable way, another ingredient is necessary. Goals must be developed.

GOALS

We, as teachers, must have goals to know what we want to achieve. We must have goals to know where we are aiming or where we are going.

What are your goals as a teacher? Are they to teach how and why? Are they just to teach "about" things? Are they like the teacher whose goal was to teach about 50 minutes in one class period? We must have worthwhile goals for our teaching; but the goals must be properly centered.

What is the center of your teaching? Let's provide student-centered teaching and not teaching centered around subject matter, program, or self. If we serve our students well, our programs and careers will benefit. If our teaching is to be "student centered," we must accept the idea of teaching individual students in classes rather than teaching classes. If we are to teach individuals, we must know our students. We can learn from records and visits. We must give students a chance to talk and express themselves, and we *must* be alert and observant.

We must shy away from faulty and dangerous assumptions which prevent us from knowing and understanding each student. We must find the answers to such questions as:

a) How well can he read?
b) Is he in good health?
c) What is the home life like?

We must remember, however, that for really effective learning and development, the student must have his own goals. Often we mistakenly assume that our goals are the student's goals. Frequently they are not. This might be good. Sometimes our goals are not appropriate for our students. Student goals in a class vary greatly. But each student does need to establish goals worthwhile to himself.

We must help the student formulate his goals. The establishment of goals for disadvantaged students is to some extent different than for more advantaged students. First of all, goals must make sense to the student in light of his experiences and attitudes. At first, the goals for him *must* be:

1) *Short term goals,* not something for next year or when you grow up, but for today or this week or this month. Some short term goals might be a part-time job for money to buy clothing or money for a date. It may be learning a simple motor skill.
2) *Easily achievable.* Don't provide students with false hopes toward reaching goals they cannot achieve. Help them set "reachable" goals.

In order to develop goals and inspire disadvantaged students, we must often work with the environment, not just the student.

WHAT ENVIRONMENT?

School is obviously one big slice of the environmental surroundings of the student over which teachers exercise considerable control. We can help make school a place where the boy or girl can live and work happily. We can develop the attitude among students that this is "my" school and not just "the" school.

The family is a key portion of the environment of the student. Sometimes parents are against, or at least do not actively support, school attendance and achievement for their children. Sometimes the disadvantaged students does not have a suitable family relationship. Teachers have opportunities to influence the family environment. We can confer with and inform parents. We have an opportunity to influence parental attitudes through student success in projects, youth organizations, school work, and work experience programs. Maximum success in working with disadvantaged students requires family involvement and family support of the goals and aspirations of the student.

We often have some influence over the community environment. Through taking part in civic and community action programs we may be able to provide favorable conditions in which our students will be more successful.

EXPLORATORY INSTRUCTION

We, as vocational educators, have a unique role to play in exploratory instruction regarding career opportunities. We have contact with our students through classes, youth organizations, occupational experience programs and home visits. We have considerable knowledge of job opportunities and characteristics as well as the requirements for entering these jobs. How can we expect the guidance counselor to be acquainted with job opportunities in all fields? We have a big role to play in providing this kind of information.

We must develop in our students a view of what jobs are really like. What do people in food service, retail business, or the farm implement business do each day? A realistic job concept is critical for realistic exploration and appraisal by students.

The student must be helped to identify the job possibilities in certain fields. What are the chances to get the job? What are earning possibilities and working conditions?

Students must be helped to examine themselves in light of possible career choices. What do I like? What are my strong points? What are my limitations? What are my interests? These are questions that each student must consider in making even the early and tentative occupational choices.

The question of what is needed to get the job must be examined. What personal characteristics are required? What preparation is needed? Will I be able to get this preparation and training?

We, as vocational educators, have an obligation to provide exploratory instruction. How can this be done? My suggestion is: *teach careers with each unit of instruction!* When teaching a soils or welding unit in Vocational Agriculture, examine the associated career opportunities. When students develop serious occupational interests, provide opportunities for exploratory experiences in those areas. Placing career instruction in the curriculum will be more effective than providing an isolated "careers unit" in some course. Here is an opportunity to really teach — not just provide information.

THE CHALLENGE

Let us not look upon ourselves as a faucet or pipe through which information flows but as engineers who set up situations in which students, through their own activities, learn, become changed, and succeed.

Are your students privileged or disadvantaged? Which will it be? The quality of your teaching provides part of the answer.

RURAL EDUCATION—DISADVANTAGED YOUTH

Lloyd J. Phipps
University of Illinois, Urbana

Hollie Thomas
University of Illinois, Urbana

David Williams
University of Illinois, Urbana

The recognition that poverty exists in rural areas, the identification of the disadvantaged in rural areas, the assessment of the characteristics of the rural disadvantaged, the unique problems of the rural disadvantaged, and the development of an educational program that would effectively and efficiently serve rural families that were disadvantaged were the primary objectives of a research project started in 1965 and concluded in July of 1970. The official title of the project was, *Development of Human Resources Through a Vocationally Oriented Educational Program for Disadvantaged Families in Depressed Rural Areas (REDY).*

A major premise of the project was that to serve effectively the educational needs of rural families in deprivation it would be necessary to work with whole families on the assumption that the task could not be accomplished by serving the children or the parents separately.

The Educational Program

Utilizing the information gleaned from a comprehensive study of rural disadvantaged families, a vocationally oriented family-centered educational program was developed that could be conducted by a teacher of agricultural occupations in a rural secondary school. Based on needs of the rural disadvantaged, units of instruction, teaching topics and anticipated problem areas were identified and incorporated into a program plan. The educational program focused upon three major units: (1) determining realistic career choices and plans for the children, (2) improving family financial management and (3) improving family income. Topics included in the educational program were:

1. Understanding the high school occupational training and guidance program.
2. Identifying educational and training agencies in the community and state.
3. Helping family members establish educational and occupational goals.
4. Helping youth through community action programs.
5. Analyzing family expenditures.
6. Establishing long-range family financial goals.
7. Developing family financial plans.
8. Developing financial plans and using business and family records.
9. Adjusting family resources to increase family income.
10. Using credit wisely.
11. Utilizing community services.
12. Reviewing and revising family goals.

A single school district in a depressed rural area was utilized to try out the educational program. Data from pretest-posttest measures and subjective evaluation by the local teacher guided the development of the model educational program that was later conducted and evaluated in five other Illinois secondary schools. Each school recognized the REDY Educational Program as a part of the adult education program of the agricultural occupations department. The program was conducted as a part of the local secondary school's effort to improve education and meet the needs of people residing in the community. The instructor served as the local coordinator and instructor.

The Agricultural Education Division, University of Illinois at Urbana-Champaign, provided assistance to the cooperating schools in the form of source units, teaching plans, selected visual aids, and program evaluation.

Prior to conducting the vocationally-oriented family-centered educational program in a local school, specific action was taken by the teacher of agriculture to (1) identify disadvantaged rural families in the community, (2) establish rapport between the teacher and family members, and (3) motivate families to cooperate by participating in the educational activities. Personalized activities conducted by the local teacher as a part of the initiation stage of the educational program were necessary to gain the cooperation and confidence of both adults and children.

Teaching Procedure

Family members, adults and children over twelve years of age, in the experimental educational program were encouraged to attend 12 group meetings conducted monthly. The problems and concerns of participants directed the educational activities. The teacher generally followed the teaching plan provided in conducting the educational activities, but adapted the plans to meet the needs of his group. Group meetings were usually held at the local school, but the teacher was free to conduct meetings in homes or other locations. Meeting times and dates were set to accommodate the families involved, but were normally scheduled for two hours during the evening.

After each group meeting, the teacher made an instructional visit to the home of each family enrolled in the program to personalize the instruction. The teacher reviewed the previous group meeting, related the information covered to the particular family situation, aided the families with their unique problems, sought problems he could help with and motivated the families to attend the next group meeting.

During group meetings and the follow-up home visits, the teacher encouraged each family to establish realistic goals that would improve family conditions. Throughout the program, family members were urged to take action to accomplish their goals.

Evaluation

The evaluation of the educational program was based on data collected before and after the educational program was conducted. Data collected from the families of the experimental group were compared with data collected from families in the other communities who had not been included in the educational program, the control group. The battery of data collecting instruments included measures of (1) parental desire for their children, (2) occupations and organizations of parents, (3) situations and goals of children who were twelve years of age or older and living at home, (4) situations and goals of the family, the farm business, (5) the home and its surroundings, (6) attitude toward community, (7) perceived social class, (8) deprivation, (9) leisure time, and (10) school attendance and grades.

Analysis of the data showed significant positive changes in the situations and attitudes of the severely disadvantaged families who were involved in the REDY educational program for many of the variables included on the data collecting instruments. Some of the generalizations from the results of the comparisons made between the experimental and control groups about the results of the educational program on the attitudes and situations of severely disadvantaged families are:

1. Parents in the experimental group chose to leave the choice of the place for their children to live and the type of occupation for their children up to the child, wanted their children to attend specialized vocational schools or junior colleges, and were able to estimate realistically the cost of post-secondary education for their children.
2. Husbands, who were involved in the program, reported learning new agricultural and business skills, wanted to obtain a different job, and participated more in groups and organizations.
3. Children in the experimental group had specific occupational goals, were able to estimate the cost of post-secondary education, desired the rural area or small town for the location of their lifetime work, knew the level of income they wished for their lifetime work, and desired higher incomes.
4. Families in the educational group sought to alleviate their disadvantaged economic situations by having more family members obtain a job, expanding the production of home-raised products, developing a list and shopping around for good purchases, keeping records of expenditures, eliminating certain items of expense, budgeting amounts spent, doing without some items, receiving services from the local school and from the employment service.
5. Families in the educational group sought to improve their environmental situation by repairing and remodeling their houses, obtaining better furniture, and improving the condition of the yard and surroundings.

The experimental group, when compared to the control group, exhibited higher morale and better general adjustment. This rise in morale, the status of emotional well-being that delimits the effectiveness with which one works and reflects one's outlook on life, should and apparently did increase the individual's energetic participation and enhance his effectiveness to accomplish the task before him.

Summary

Many of the objectives of the study and many of the research hypotheses were accepted. It was found that an effective way of serving the educational needs of rural disadvantaged families was to educate them in family groups. An effective educational program was developed in sufficient detail to be used in the future by professional teachers with a minimum of specialized preparation. The experimental groups receiving this educational program were significantly different at the end of the project in several dimensions from the control groups who had not experienced the educational program. A summary of the final report of the project may be obtained from the Agricultural Education Division, Department of Vocational and Technical Education, University of Illinois, Urbana, Illinois 61801. The final report and the other twelve major reports of the project will be available on microfiche and will be listed in ERIC.

Making Agriculture Relevant For The Disadvantaged

James I. Dawson
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Normal, Alabama

The lives of millions of individuals are conditioned by deprivation because of a lack of relevant vocational education training programs, especially in rural areas.

In the past, the disadvantaged segment of our society has been pushed aside into a state of isolation. This group of people has been a repudiated and disfranchised portion of our society. They have been considered to be in, but not of our culture. Because of their academic background, socio-economic level, and other handicaps, both physical and mental, these persons have not had the opportunity to share in our affluent society.

To neglect educating and training the disadvantaged portion of our society is a waste of human resource which is detrimental to the welfare of our nation. Therefore, it is imperative that we place special emphasis on educating and training the more than 35 million disadvantaged persons in this country.

Vocational Education in Agriculture must take a leading role in educating and training the disadvantaged for employment. Forty-three per cent of the nation's poor live in rural areas and most rural high schools have only Vocational Education in Agriculture and Home Economic.

Since about 80 per cent of the more than 57 million rural population do not live on farms, local vocational agriculture programs must become more relevant to the immediate and ultimate needs of the rural disadvantaged segment and preparation for off-farm employment.

With the tremendous migration of population from rural to urban areas, we can not justify a program designed only to prepare boys for farming. The 1963 Vocational Education Act and the 1968 Amendments enabled Vocational Education in Agriculture to get out of the "obsolete" Smith-Hughes bag.

Making the Program Relevant

This proposed two-step method of developing and implementing a comprehensive program in Vocational Education in Agriculture for the disadvantaged is not novel. The procedure is the same as the conventional method, "determine the needs and develop the program based on these needs". However, there must be a degree of novelty in the technique used if we are to be successful.

Understand the Disadvantaged

To be successful in understanding the disadvantaged, we must understand their problems, social, economical, etc. We must detect special problems of the disadvantaged, such as, (1) difficult attitudes, (2) lack of self-confidence, (3) low self-esteem, (4) high degree of dependency, (5) limited perception of the value of education, (6) short attention span, (7) day-dreaming, (8) low aspirational level and few personal goals, and (9) lack of motivation. These problems must be interpreted, not as inferiority characteristics, but as marks of past experiences caused by forced environmental conditions. Our teaching should be relevant to alleviate these conditions.

Understanding the disadvantaged is not a difficult task. However, the educator must develop a sympathetic attitude toward these individuals and be able to resist or cope with any derogatory remarks made by them in his effort to gain their confidence. It is imperative that we gain the confidence of these individuals, otherwise, they will not discuss their problems with us and some needs not determined from observation and surveys go unnoticed.

PROCEDURES FOR STEP I:

1. Develop a sympathetic attitude toward disadvantaged individuals.
2. Become familiar with unfortunate environmental conditions which produce these persons.
3. Gain an insight of the student's concept of himself and his place in the society in which he lives.
4. Develop an understanding of problems confronting these individuals and causes for such problems.
5. Conduct surveys to gain a knowledge of problems affecting the disadvantaged.
6. Interview disadvantaged persons to obtain commonalities of personal problems affecting them.
7. Use student Perception Inventory to measure perceptiveness of students relative to school, work, family, and peers.
8. Use Vocational Interest Inventory to obtain information regarding the student's vocational maturity.
9. Use Agriculture and Biological Science Interest Inventory to determine what vocations students are interested in and if they can benefit from the Vocational Agriculture Program.
10. Use Attitude Measurement Scale to determine the student's attitude toward the school, teachers, administrators, and society as a whole.

Develop and Implement A Program

Once the immediate and ultimate needs of the disadvantaged have been determined, step II is to develop the program based on these needs.

Emphasis should be placed on exploratory courses, explaining the world of work, in junior high school, with specialized courses in senior high school. Guided occupational training programs should be available for those students who do not plan to continue their education after high school. A comprehensive work experience program, where the students are able to obtain on-the-job training should be a definite part of the work experience program. This program will enable the students to supplement the family income and reduce the school attrition rate.

The agriculture teacher should seek help and advice from industry while devoloping and implementing the program. Since many of the students will be going directly into the job market after graduating from high school, it is essential that the teacher knows and teaches those skills on which industry has placed priority.

PROCEDURES FOR STEP II:

1. Compile and interpret results from interviews, surveys, tests and other instruments used in Step I to get information to be used in program development.
2. Organize an advisory committee qualified to aid in determining needs and developing the program.
3. Consult individuals in industry to obtain information relative to information and skills to teach.
4. Use the unit system in curriculum construction, with weighted items.
5. Contact persons in industry and set up training centers for the occupational training programs.
6. Develop and implement a placement and follow-up program for students going directly from high school to jobs.
7. Aid students who plan to further their education to enter trade school or college.
8. Construct an individually oriented curriculum with built-in control and with the variety of materials and pathways needed to accommodate students of varying abilities and interests, and different career objectives.
9. Design the curriculum to show a catalogue of appropriately classified performance objectives stated in terms of out-put specifications.
10. State performance objectives relevant in preparing the students for their chosen vocations, and for citizenship.

The following are suggested methods and techniques of teaching to use:

Methods

1. *Individualized Instruction* — Use this method to accomplish the performance objectives, while bridging the gap between classroom instruction and the initial job.
2. *Multiple-Media Approach* — A variety of visual aids usually arouse interest, especially if they represent real life situations and are adapted to the unit.
3. *The System Approach* — The students are required to master one performance objective before moving to the next objective, an effective method of teaching manual skills.
4. *The Four-Step Method* — The teacher (1) motivates the students, (2) demonstrates the skills, (3) lets the students practice, and (4) checks to determine the degree of proficiency attained. This method considers the strengths and weaknesses of the students and guides them through the procedure at a suitable pace, enabling them to master the skill. Each step lays a foundation for the next level, and can be made elementary and on the level of all students.
5. *The Whole Method* — This method allows the instructor to use a quick run-through technique giving the students an idea of how each part fits into the whole. Since most disadvantaged students are impatient, this method avoids plodding along on a small part of the process, keeping the trainees in suspense.
6. *The Part Method* — The instructor takes the whole method and divides it into parts, with each part being taught separately and in steps. The system approach should be used with the part method.

Techniques

1. *Provide for individual differences* by using individualized instruction, small group discussion, and individual conferences.
2. *Use positive reinforcement whenever possible and negative reinforcement only when absolutely necessary.* When we give reward for doing the right thing and ignore the little mistakes, we are using the positive technique, which is essential in teaching the disadvantaged. The positive technique destroy the defeatist attitude of the disadvantaged. We must make him feel that he has something to offer society.
3. *Reprimand students only when all other means have failed.* When students are subjected to pressure, usually the pay-off is resistance and resentment rather than compliance.
4. *Place emphasis on the concrete* (usage and application) rather than on the abstract (theories and formulas).
5. *Earn the respect and confidence of the students.*

A program based on the needs of the disadvantaged must face up to the fact that the environmental conditions in which the disadvantaged live have left him frustrated, hopeless and filled with despair. They have learned early in life that the educational programs were beyond their comprehension, and useless to their needs. Consequently, the disadvantaged have envisioned a wall between them and the school program. They use this wall as a protective shield against what they believe to be an oppressive society.

As educators, we are responsible for the educational system of our society. The disadvantaged segment of our society has awakened and is pleading for more recognition. The voice of the disadvantaged can best be described in the following words:

"I am a product of the disadvantaged portion of your society, and all the world is partially responsible for my short comings.
All the world watches to see what I shall become, but no one takes the responsibility of developing me. However, for what I am the world of tomorrow will be.
I am the child who has come into your world about which I know nothing.
Why I came or how I came, I know not.
You could make me curious and interested if you would only try.
I am the child whose destiny you hold in your hands.
You are the major determining factor as to whether I shall succeed or fail.
I pray to you, give me those things that make for happiness.
I beg of you, please train me, that I may be a blessing and not a curse to your society."

Programs For Students with Special Needs

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The Vocational Act of 1963 provided for developing programs in vocational education for special needs or disadvantaged students. The 1968 Amendments placed additional pressure on vocational education to provide training for these students. Vocational education has accepted the challenge to equip these students with the skills necessary to become productive citizens.

With the shift in manpower needs from primarily "blue collar" and manual labor toward the "white collar" worker, it is becoming more difficult for disadvantaged persons to find adequate employment. To meet the needs of this group, many new vocational education programs are being implemented. Because of this addition of new programs, the pilot programs were studied to determine relative strengths and weaknesses. Information thus obtained could be utilized to establish new special needs programs on solid foundations.

Purpose of the Study

This study[1] was conducted to provide vocational educators in agriculture and administrators with information which could be utilized in the decision-making process for resource allocation, program planning, and improvement, staff selection and training, and program implementation for special needs students in Mississippi. Other specific objectives of the study were:

1. To provide a composite description of existing programs for special needs students in agriculture;
2. To provide a profile of teachers of special needs students;
3. To provide information on students enrolled in special needs classes;
4. To compare the self-appraisal of vocational education programs for special needs students between local school administrators and teachers of special needs students; and
5. To determine how well the program was accepted by special needs students, parents of special needs students, and the public.

Research Methodology

This study consisted of all programs in agriculture for special needs students in Mississippi which had been operating one or more years previous to the time of the study. Questionnaires were mailed to all teachers and administrators of agricultural special needs programs. Information requested concerned program information, teacher characteristics, student information, and a self-appraisal of programs by both teachers and administrators. Also an intensive interview was conducted with a stratified sample of teachers, administrators, and students directly involved in the program.

Program Information

It is apparent that agricultural programs for special needs students in Mississippi have centered around agricultural mechanics. Such programs are designed to equip special needs students with skills necessary to enter employment in firms utilizing persons with agricultural mechanics competency.

Both teachers and administrators agree that special needs programs have decreased but not eliminated the dropout rate in their respective schools. Teachers and administrators give the following reasons for students dropping out of the programs: family problems, financial problems, employment, lack of interest, lack of encouragement, and lack of discipline.

Teachers and administrators described the curriculum for their special needs programs as being off-shoots of regular agricultural mechanics instruction. Curriculum materials or subject matter were developed for the program by simplifying ideas from existing materials. Some teachers indicated that they used charts and diagrams to advantage in their special needs classes. Both teachers and administrators described curriculums as being person-oriented and skill-oriented, with greater emphasis placed upon skill training. There were, however, programs that included basic education in the curriculum. Programs generally provided a three-hour block of time for shop work and a three-hour block of time for specialized basic education (English, math, etc.).

Teachers generally felt there were limited instructional materials available for use in special needs classes. When asked to identify sources of such materials, less than one-half of the teachers or administrators could list one source.

Teacher Characteristics

The formal education level of teachers ranged from the 12th grade to two years or less college. The major fields of college study listed by the teachers were agricultural education or trade and industrial education. It was noted that surprisingly few teachers indicated any vocational organization in which they actively participated.

Most teachers reported having six or more years nonteaching work experience in a field related to their teaching area such as farm equipment dealer, farm equipment mechanic, auto mechanic, farm manager, farmer, and construction worker.

Teachers also reported generally as having two to three years' teaching experience in agricultural education or trade and industrial education, with the majority in agricultural education.

Student Information

Students enrolled in agricultural special needs classes were reported as being in the ninth to the twelfth grades. They were described as being educationally deprived on the basis of tests, past records, and observed student behavior. Students were selected for the program by a committee composed of vocational teachers, guidance counselors, administrators, and other teachers in the school.

Self-Appraisal of the Program

The self-appraisal of the agricultural special needs programs made by teachers and administrators revealed that teachers rated the program higher than the administrators. The specific aspect of the program receiving highest rating by teachers was the degree to which other vocational teachers were involved in the program. The aspect receiving the highest rating by administrators was the degree of communications sustained between State Department of Education personnel and local school personnel. The lowest rating given by teachers and administrators was the degree to which other faculty members in the school were involved.

One aspect of the program emphasized by teachers was that administrators used the special needs classes for maintenance crews on the campus and called on them to repair anything from fences to sewer lines. Teachers felt this was bad and resented the administrators' abuse of their classes. Administrators felt that those teachers who had no college training or credit (even though they were especially well-qualified as "skilled" persons) needed training in methods and techniques of teaching. They indicated that because a person is skilled in an area does not mean he can teach others that skill.

The degree of acceptance of the program was rated high-average by both teachers and administrators. Both teachers and administrators indicated that students had accepted the program to a higher degree than parents and the public. They indicated when the program began, parents and the public knew very little about it because no orientation or introduction of the program was made. This lack of understanding led to reluctant parental and public acceptance of the program. Acceptance increased as the program progressed.

Teachers and administrators felt some facilities and equipment were inadequate. Students recognized they could receive greater benefits if more equipment, machines, and work experience were provided. Generally, teachers and administrators felt additional courses should be offered for the special needs students.

Very few teachers had written goals and objectives for their program, due to lack of training in methods and techniques on the part of some teachers. Teachers reported that limited availability of specific machines and equipment in their classes, made it impossible to follow a course outline or to set objectives.

Suggestions for Teachers and Administrators

To increase the effectiveness of agricultural programs for special needs students, the following suggestions are made:

1. Increased facilities, equipment, and supplies may be needed above those supplied the regular programs.
2. The public should be involved in the development and implementation of the program.
3. Emphasis should be placed on basic education (English, math, etc.) as well as skill training.
4. Teachers should be required to have training in methods and techniques of teaching before being employed.
5. Teachers should be required to work toward a college degree within a reasonable limit of time after being employed.
6. Additional courses should be offered in agriculture (both in production and nonfarm) to special needs students.
7. Specific selection criteria should be developed.
8. Teachers, administrators, and guidance personnel should work closely in the operation of the special needs program.
9. Non-degree teachers should be closely supervised by a vocational teacher who is certified and has teaching experience in the field directly related to the special needs program.
10. Written course outlines, goals, and objectives should be required and followed for each special needs class.
11. Special needs classes should not be utilized for maintenance purposes.

This writer feels that the above suggestions, if followed, would be of value to the improvement and development of programs for special needs students to meet the needs of these students to the extent that they could become productive citizens and take their rightful place in society.

1. The author's M.S. study, "A Description and Self-Appraisal of Agricultural Programs for High School Students with Special Needs in Mississippi."

How Disadvantaged Students Respond To Work Experience Programs

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Occupational work experience programs are advocated for the retention of potential high school dropouts. These programs are designed to hold academically handicapped students in school while providing them with basic educational and occupational competencies that will enable them to enter and succeed in gainful employment.

The writer conducted a study of seven selected secondary schools in Ohio to describe the nature of agricultural work experience (AWE) programs for academically handicapped youth and to investigate the relationship between enrollment in AWE programs and the social behavior, academic performance, and vocational preparation of the academically handicapped youth. Information concerning the schools and the nature of the AWE programs was obtained from principals and teachers. One hundred and fifty nine academically handicapped students enrolled in agricultural work experience programs were compared with selected students of similar environmental and socioeconomic backgrounds who were enrolled in regular production agriculture programs.

FINDINGS

What special provisions were made to ensure the effectiveness of these programs relative to their organization, the selection of students, and in the structure and content of the educational program?

1. The majority of the prinicpals and the vocational agriculture teachers who conduct the AWE programs indicated that the primary purpose of these programs was to use instruction in agriculture as a vehicle to stimulate students to achieve academically and to prepare them for entry into occupations requiring knowledge and skills in agriculture.

2. Criteria applied in the selection of students for AWE programs included intelligence test scores, age, desire of students for enrollment, and the consent of parents. The cooperative selection of students by teachers who conduct the AWE programs and the school's guidance counselors was most common.

3. Advisory committees played a minor role in the planning of the agricultural work experience programs for academically handicapped students.

4. The curricula of the programs studied generally were unstructured. Curriculum materials used in the AWE programs consisted of instructional material developed by individual teachers or selected from published material, and *Occupational Work Experience,* curriculum materials published by the Ohio Department of Education. Agricultural subject areas most frequently taught were the repair and maintenance of small engines, and agricultural business and supply services. The non-agricultural topics reported most frequently were securing a job and employer-employee relations.

5. Cooperative work experiences were most frequently provided by farm equipment dealers, feed and seed dealers, service station operators and automobile dealers. Teachers in some localities indicated a shortage of suitable work stations for the placement of eligible students.

6. All of the AWE programs included some form of remedial instruction for the academically handicapped involving individualized assistance in the development of skills in English reading and mathematics.

7. Principals of the high schools indicated that the most important factor influencing the effectiveness of the AWE programs is a qualified teacher who has a desire to teach academically handicapped students.

The second major objective of the study was to investigate the relationship between enrollment of academically handicapped youth in agricultural work experience programs and: (a) their social behavior, (b) academic achievement, (c) educational and occupational aspirations, and (d) their interest in agricultural occupations.

A comparison of the social behavior of the academically handicapped students prior to and after their enrollment in the AWE programs shows that: (a) the proportion of academically handicapped students who participated in one or more school service activities decreased from 26 percent to 6 percent, (b) the percentage participating in one or more community activities decreased from 31 percent to 24 percent, and (c) the percentage participating in one or more student organizations decreased from 51 percent to 48 percent.

While enrolled in the AWE program, the academically handicapped students participated in the FFA to a lesser degree than did the regular vocational agriculture students. The proportion of AWE students reporting active membership in the FFA was 26 percent lower than the proportion of regular vocational agriculture students (who were active members).

Teachers of academic subjects rated the academically handicapped students higher on citizenship after their enrollment in the AWE programs than they were rated prior to their enrollment.

Enrollment of the academically handicapped students in the AWE program was accompanied by a decrease in school absenteeism. The proportion of this group absent from school ten or more days dropped from 44 per cent prior to their enrollment to 16 per cent while they were enrolled in the AWE programs.

The study also indicated that academically handicapped students improved in academic achievement after enrollment in the AWE programs. Their mean grade point average in English, social studies, mathematics, science, and vocational agriculture increased from 1.53 for the year prior to enrollment to 2.03 for the first semester of their enrollment in the AWE programs.

Responses from the academically handicapped students concerning their educational and occupational aspirations indicated a desire to continue their education, or get a job, or enter military service after high school. None of the members of this group indicated the desire to attend a four-year college.

On an agricultural occupations interest scale the academically handicapped students scored higher in production agriculture than in agricultural mechanics, ornamental horticulture, conservation and agricultural business.

IMPLICATIONS

This study provided a number of implications for planning and conducting vocational programs for academically handicapped youth.

1. The role of an advisory committee in the development of agricultural work experience programs was not firmly established. Teachers need to more fully acquaint advisory committee members with the problems of academically handicapped youth, and for greater consideration of this group in the overall planning of vocational programs.

2. The absence of curriculum structure was accompanied by a lack of curriculum materials developed especially for students who have little interest in reading and writing. A variety of curricular alternatives are usually required in teaching disadvantaged pupils. Vigorous efforts by teachers and curriculum specialists are needed in the discovery, development, and dissemination of curriculum materials that stimulate learning among academically handicapped pupils.

3. Small communities usually do not accommodate the need for training stations for academically handicapped students who are in need of opportunities for work experience. This problem is further complicated when more than one cooperative vocational program is conducted from the high school. To alleviate this problem, schools should include more classroom exercises devised to simulate work experiences and laboratory experiences designed to develop social, academic, and occupational competencies.

4. The academically handicapped students reduced their participation in school service organizations, the FFA, and other student organizations while enrolled in AWE programs. Does enrollment in AWE programs deprive academically handicapped students of opportunities for social development gained through participation in school activities and student organizations? Here may be a challenge to FFA leaders to explore new approaches toward increasing active participation of academically handicapped students in the FFA. There may be a need for new programs and activities designed to meet the needs of low-income and academically handicapped students.

5. The decrease in days absent from school, and the increase in grade point average after enrollment in the AWE program indicate that potential dropouts, through their enrollment in AWE programs, can be influenced to remain in school and become motivated to improve in academic performance.

6. The lower level of educational and occupational aspirations held by the students enrolled in AWE programs emphasizes the need for their early and continuous contact with models of occupational success to improve their educational and occupational outlook.

7. Academically handicapped pupils need teachers who will confidently guide their development in the wide range of social, academic and occupational skills in which this group is notably deficient. Teachers and teacher educators need to discover new and innovative methods of teaching academically handicapped pupils and the inclusion of these methods in the preservice preparation of vocational teachers.

This article is based on the author's doctoral study, "Agricultural Work Experience Programs for Academically Handicapped Youth in Secondary Schools," completed at The Ohio State University in 1970.

BOOK REVIEWS

CHOOSING YOUR JOB: Albany, New York; Delmar Publishers, 1970, 52pp. $.94.

This book is just what I've been looking for in teaching supervised occupational experiences in agriculture at the high school level.

It is a self-study guide written in a simple, direct, concise manner. It uses the style of programmed instruction in which information is divided into small frames that are presented one at a time. After the student reads a frame there is a question relating to it. In the margin of the next frame the correct answer appears. The student goes at his own pace and corrects any errors. The book gives an overview of an occupation; lists the duties of workers; explores the physical, social and psychological aspects of working conditions; gives requirements for entry into the occupation; outlines employment outlook; gives a limit at pay and plan of promotion; a brief look at geographical distribution of workers; finally, a section on related occupations.

FINDING AND HOLDING A JOB; Albany, New York; Delmar Publishers, 1970. $.94.

This book is a self-instructional type where material is organized into small sequential parts—the student being questioned on each part before going to the next frame. It allows for individual differences in reading ability and comprehension as it is simply written and no time element in completion. It covers the areas of: sources for finding a job; preparing for the job interview; job interviews; keeping the job. A short test ends the book. The answers are not given for this test, the key must be ordered separately.

When I was requested to review these books, I had a limited opportunity to give them a practical test on my oldest son. He was in position to use this information immediately as he was unemployed. His 3 year employment had been on an assembly line job and he wanted employment as a hospital orderly (working with people). While home, he read these two books. We got a happy letter from him one week after he returned to Minneapolis: "I got a job! It's at the V. A. Hospital at Fort Snelling. I followed the tips suggested in the two books; got my hair trimmed and combed; wore a suit and tie; had a notebook and pen; listed the places worked previously; and had a list of references. I made a good impression on the personnel director, etc."

Evaluation:

1. Properly used, these two books will aid in teaching.
2. They follow good principles of learning.
3. When the student has a readiness to learn, these books provide the information as logically and directly as any teaching materials I've reviewed or used.
4. They allow for individual differences.
5. The instructions are simple.
6. They are well illustrated.

I don't feel that they substitute for the teacher completely, but could effectively be used as one of various teaching devices. The books would be equally valuable for post high school.

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CLUB ACTIVITIES SUPPLEMENT YOUTH PROGRAMS

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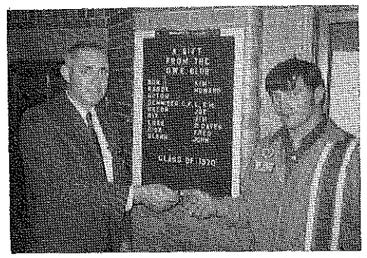
A student activity club is a necessity of any special needs or disadvantaged youth program administered through vocational agriculture. In some schools the program participants affiliate with the local FFA chapter, but in many cases these students come from diversified, non-agricultural backgrounds and may have no interest in agriculturally-oriented youth activities. To serve the needs of as many as possible, I believe that the program coordinator should establish for his students, club activities for their particular program in addition to other club affiliations they might hold.

Every student in a given program is eligible for club membership by virtue of his participation in the program and should be encouraged to pursue an active role. For many special needs/disadvantaged students this opportunity may be the first they have had to become involved with an ongoing club. The club should function as any other school club — meeting on designated days, conducting business meetings, and engaging in school service projects, money-raising activities, and recreational pursuits. In cooperative programs, students must necessarily miss some school activities so such a club should be as well-rounded as possible in order to supplement these deficiencies in the students' academic lives.



Club president presenting the school principal with keys to the activities board, purchased at a cost of over $100.00 and paid for from the club treasury.

People usually appreciate something more if it costs them something. Since in most special needs/disadvantaged youth programs the students will be earning money from job placements, dues should be levied. The dues, along with money earned from projects, can eventually accumulate to the point that students may purchase club T-shirts, jackets, or a club banner, thus giving them tangible returns from their investment. These returns can have a positive effect on the club members' continued efforts in other projects as well as their future payment of dues. The program coordinator who can inspire his students to work hard to build up their treasury will see the club become one of the wealthiest in the school. This can enable the students to do things in fine style at the end of the school year. A club trip, an Employers' Dinner, gifts for employers, student awards, a gift to the school — all can make the year of work well worth the effort. Too, such end results will gain for the students much-needed recognition and respect from other students and the community.

The club should focus on students' needs both individually and collectively. In terms of leadership, a wide range of officers and assistants should be elected thus extending shares of official responsibility as far as possible. Each student at some time during the year should be delegated committee or individual club duty. Students' schedules permitting, competitive sports, e.g. intramural basketball, should be organized. All students should be encouraged to participate. While serving to keep the students represented in general school activities, the team spirit and subsequent club solidarity can be used to channel the efforts of the club effectively into other activities.

One particular club function, the school service project, cannot be overstressed. This type of project, which may range from painting classroom doors to providing seating signs in the gymnasium, can be worthwhile in two areas: first, through providing these services individual students can receive credit and recognition from teachers and administrators with whom their previous contacts may have been negative. Second, school service projects provide an excellent means of recognition for the club as a unit. This is a desirable side product that can be utilized by the coordinator in terms of good public relations to insure the continued effectiveness and success of his program.

A comprehensive, out-of-class club provides a logical, workable extension to the in-class instruction of a special needs/disadvantaged youth program. As the curricula of these programs are focused on practical development and adjustment, programmed club activities can serve as an essential vehicle to provide individual learning experiences. The learning experiences provided by the instructional curricula will be enhanced by the program of an affiliated club in which every student is involved.

The author, at right, shown with employers and students with their awards at the Employer Appreciation Dinner sponsored by the club. Jackets worn by the students were purchased by the club.

VOCATIONAL TRAINING FOR THE EDUCABLE

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Most teachers prefer to work with bright students who are able and eager to learn. These students will be the leaders of tomorrow and it is satisfying for a teacher to think that he was instrumental in each student's success. It could be, however, that these bright, enthusiastic students would have made the grade without us.

At the other end of the scale is a different type of student for whom teachers of agriculture should strive to provide meaningful programs. Students of low intelligence, in particular the educable mentally retarded, will not be able to function successfully in society without help. Agriculture teachers have the background and facilities to help these students — what we need is the desire.

The agricultural industry needs highly trained people — we cannot ignore this demand. Conversely we must realize that there are many agricultural jobs that could be filled by students of less than normal intelligence. If agricultural education is designed to prepare students for employment, then we should train students for all types of jobs.

At Ceres it is difficult to work educable mentally retarded students into our regular agriculture courses. The pace was too fast for them so they became frustrated and stopped attending class. In agriculture shop they lacked coordination to handle power tools safely, therefore they spent their time watching others work or sweeping the floor. This increased their frustrations. We had several of these students in our classes so decided the time was right to do something for them.

After considering the job opportunities in the area and the facilities available at the high school, we decided to start with a class in Landscape Maintenance. The instructors' schedules were full so we selected two advanced Ornamental Horticulture students who were willing to work with five educatable mentally retarded students. The student instructors were selected on the basis of their knowledge of landscaping and their compatibility with students. Prior to meeting with their students, they received extensive counseling from the special education instructor. The class was opened to all interested educable mentally retarded students and enrollment was voluntary.

Our objectives were to teach the students the basic skills required to do landscape maintenance work, to give them an opportunity to learn how to work in a supervised group, and most important to offer them a program in which they could succeed. The results were far better than we expected.

The class took over part of the maintenance of the campus so the boys worked outside as much as possible. They were involved in the activities normally performed by landscape maintenance personnel including the renovation and seeding of bermuda grass lawns for winter color. When weather prohibited outside work, the students worked in the greenhouse or discussed the hows and whys of their maintenance work.

The quality of their work was important, however, the establishment of positive attitudes towards school and work was of greater importance. It is in this area of attitude that we had our greatest success. In most cases the boys really enjoyed the work — so much so that their enthusiasm drew several more students into the class. They were never late for class and never asked to leave early. When there was work to be done, they did it without argument or complaint. The students were eager to know what they were going to do at their next meeting. They considered this class to be their best class. The teacher in charge of Special Education said that the students' attitude toward school improved and they worked harder in their other classes.

The success of the program was based on several factors. First, it was an outdoor practical activity instead of indoor bookwork. The students felt at ease working outside — they talked freely and answered questions readily, however, when the group moved inside they became withdrawn and reluctant to converse.

Second, the students were graded on their willingness to work and on the quality of their work. The students got higher grades in Landscape Maintenance than any other class. A good grade was treasured by students who have received few if any passing grades in eight to twelve years of schooling.

Third, the students felt less threatened when working with their peers. Students can be cruel and the brunt of this cruelty often falls on the mentally retarded. In this class they were not heckled by other students because of their speech, their poor coordination or their lack of intelligence.

Finally, an important factor in the success of the program was the ability and understanding nature of the student instructors. They established a rapport with their students which enabled them to accomplish their objectives with little difficulty. They spent time with each student and offered him individual help as needed. They worked with the students rather than showing them how and then watching. These students need our help — they can't make it on their own.

IS GROUPING THE ANSWER?

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Considerable emphasis has been placed in recent years on providing instruction in agriculture for persons who are said to be "disadvantaged." One of the concerns of teachers and administrators has been how to organize and administer the instruction. A perplexing problem frequently encountered is concerned with "grouping."

What use should be made of various grouping techniques in teaching the disadvantaged? The term "disadvantaged" must be defined and the needs of such persons identified.

Disadvantaged Defined

Simply, a "disadvantaged" person is one who has not found a place for himself in the mainstream of the segment of society in which he lives. This definition is deemed to be particularly pertinent to a discussion of grouping, and further explanation is needed.

A considerable amount of variation exists in the way Americans live. The style of life of persons in rural areas may differ considerably from that of persons in suburban or urban areas. A person living in a rural area who is not disadvantaged might be disadvantaged if he were suddenly transplanted into a large city. The rural disadvantaged, then, are those who do not participate in the mainstream of activity in rural areas.

Disadvantaged is a relative term. Persons may be said to be economically, culturally, socially, or educationally disadvantaged. A person who is economically disadvantaged has a disadvantage relative to some other person. In other words, this person might not have as much money as the other person. Yet, this alone would not make him disadvantaged. The problem has deeper roots than mere volume of money. It is also reflected in how the available money is used.

Needs of the Disadvantaged

The needs of many rural disadvantaged—substandard housing, lack of clothing, and an unbalanced and inadequate diet—are characteristics related to economics. Insufficient income will cause a person to be disadvantaged in terms of what an adequate income will obtain — education, social status, and self esteem.

Most agricultural education programs are concerned with persons living in rural areas. The Rural Task Force on Vocational and Technical Education (1970) indicated that 43 per cent of the poor people in the United States live in rural areas although the rural area represents only 29 per cent of the total population. Therefore, teachers of agriculture may have higher proportions of disadvantaged students than other teachers, with the exception, perhaps, of teachers in impacted urban ghettos.

Disadvantaged students frequently come from homes and neighborhoods where models for success in school and work are lacking. This is reflected in attitudes toward learning, school attendance, verbal expression, and respect for school authority. The teacher of agriculture often serves as a model to his students and to the school community.

Our society is dominated by the culture of the middle class. All persons in our society are evaluated or compared with the middle class and what it supposedly represents. In a sense, the needs of the disadvantaged are those things necessary for them to fit into the middle class, or mainstream of society. This raises the issue of value systems as related to needs.

The status of persons may be reflected in the value system they hold. Persons in the so-called middle class have values which are similar in certain respects and dissimilar in other respects. The similarities cause them to fit into the middle class. Certain similarities in values may also exist in the disadvantaged and the middle class but these are not the similarities which determine whether or not one is in the mainstream. This analysis tends to support the teaching of certain values in the school, which here-to-fore has been considered taboo. Much consideration must be given to organizing and administering instruction for most efficient learning.

Grouping for Instructional Purposes

"Grouping" is accomplished by placing students in classes, sections, or subgroups, on the basis of one or more criteria. There are many bases for grouping such as: age, sex, years of schooling, achievement, and measured ability. Students placed in groups with nearly identical or similar characteristics are homogeneously grouped. In this same group the students may be heterogenously grouped if other criteria are considered. The terms grouping and homogeneous grouping are used interchangeably in this article but they are not synonymous.

Grouping is used to cope with a wide range of variation in students. Age, the most prevalent basis for grouping, cannot be solely relied upon in providing instruction in agricultural subjects. The best criterion for grouping is achievement and not ability or some other measure.

Grouping is used to expedite learning and make the act of teaching more efficient. It helps to create conditions which will free each student to think, to express himself, to practice skills as much as necessary, and to be held in esteem by his teacher and fellow students.

The value of grouping depends upon the teacher. Grouping is dangerous when it leads teachers to underestimate the learning capacities of students. Teachers working only with the disadvantaged may tend to have lower morale. This is partially because they are associated by other teachers with the "low" or "disadvantaged." The lower morale is evidenced by the fact that the teachers of the disadvantaged frequently miss more days of teaching than other teachers.

Students who do not have the ability, have not achieved satisfactorily, or have not adjusted sufficiently otherwise to remain in the regular agricultural instructional program are considered disadvantaged and may be placed in special groups or classes.

Grouping to provide instruction in agricultural subjects may be accomplished (1) by grouping within regular classes or (2) by establishing special classes composed only of disadvantaged students. The grouping may be performed arbitrarily by the teacher or school administration or voluntarily by the pupils themselves.

Grouping within regular classes is frequently based on achievement and agricultural interests. Both disadvantaged and nondisadvantaged students may be in the same class. Students with similar interests and at a similar level of achievement are grouped together. Several groups may be formed in a single class. In these groups the students tend to learn at their own rate of speed and from each other. New groups may be formed at the end of a given period of time or when new subjects are to be studied.

Dividing a class into several groups facilitates instruction when sufficient materials or equipment is not available for the entire class to engage in the same activity at the same time. A good example is the area of agricultural mechanics where a small group of students may be learning to weld while other groups are working in areas of agricultural construction or machinery repair.

Forming small groups within classes has been used in agricultural education for a long time. It has been viewed as a way to get the teaching job accomplished. Good results are usually obtained from this grouping technique provided the arrangement is flexible and is used to facilitate learning. Periodic rearrangement of the groups will bring the disadvantaged students into contact with other students. These small groups may also be utilized to provide remedial instruction to those students needing it.

Students tend to voluntarily group themselves. They unknowingly do so on the basis of a number of criteria, including interest, home environment, social status, and achievement. It is preferable for a teacher to make the most of these kinds of groups. It is likely that the disadvantaged will group together. Some pupils tend to isolate themselves from the others and, therefore, may need to be encouraged to join with a group. A certain amount of arbitrary rearrangement by the teacher of the voluntary groups may be necessary to achieve the proper balance and to create an optimal learning environment.

A trend in recent years has been to group disadvantaged students studying agriculture into special classes. These classes may be arranged so that the students receive instruction in related areas such as English and mathematics, in two ways: (1) they may move back into the main student body and mingle with the other students, or (2) they may continue in their groups for all instruction. In the latter case, the related instruction is supposedly designed especially to meet the needs of the disadvantaged.

Several problems are encountered when the disadvantaged students are grouped in special classes. First, they are isolated and segregated from the other students and deprived of the opportunity to learn from the others. Models of successful behavior and adjustment may be lacking. The presence of regular students may have an upgrading effect on the entire class. Achievement goals and gains may be higher in classes with the usual range of differences than in specially-grouped classes. Grouping the disadvantaged into special classes may cause them to get undesirable labels. In fact, the disadvantaged may be branded as inferior when placed in special classes.

Teachers and school administrators may contribute to the labeling of disadvantaged students. Often teachers of the disadvantaged are superior teachers selected on the basis of their interests and qualifications for working with special groups. However, some do not have the training and qualifications required for teaching these students. Teachers themselves may not have an understanding of and an appreciation for the disadvantaged. Classes for these students are often held in inadequate, rundown facilities.

Disadvantaged students should remain in the regular agricultural education program if they can benefit from the instruction. This is explicit in the 1968 Amendments to the Vocational Education Act of 1963, which states:

> **"To the extent feasible, disadvantaged or handicapped persons shall be placed in regular vocational education programs to the extent that they are able to benefit from such programs and provided only with those supplementary special education services which are necessary to enable them to so benefit."**

There is no clear-cut case for or against grouping. What is needed is a dynamic, exciting agricultural education program based on an awareness of the needs of disadvantaged students and how learning occurs. Since considerable learning occurs through the imitation of examples, it appears that disadvantaged students should have maximum contact with other students. Through such contact, the disadvantaged learn the style of life necessary for them to move into the mainstream of society.

PROBLEMS, POTENTIAL, AND PROJECTIONS

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Educators use various criteria for describing disadvantaged persons. Perhaps the concepts of disadvantagement are as varied as the number of individuals having them. Regardless of the differing ideas, vocational education has been challenged to recognize and provide a program for individuals often overlooked in the past. The disadvantaged, and their resultant problems, have long been reflected by nearly one-third of all youth leaving high school before graduation (in some states). Group characteristics of these students show problems such as deficiencies in reading and other basic skills essential to learning; the lack of achievement motivation; and negative perceptions of self and education. These symptoms of disadvantagement have been recognized for several decades. However, even today, we seem to know more about the effects of being disadvantaged than we do the causes or cures. As a result, we have no single criterion for deciding if a person is disadvantaged based on a causal factor. This article examines two general extremes often assumed to be the cause of disadvantagement.

Problems

Legislation defines a disadvantaged person as one not succeeding in regular programs. However, lack of success is only a symptom of the real problem. Success involves the development of an operational definition of success as well as being an a priori approach to identifying the problem. Further classification into academically disadvantaged, culturally disadvantaged, socio-economically disadvantaged, and other disadvantaged provides little help to identify the fundamental problem. Thus, one of the first tasks in working with disadvantaged persons is to decide exactly, whom are we talking about? The general answer to such a perplexing, yet pertinent, question may be a hereditary view, the environmental one, or a combination of the two.

The Heredity Approach

This approach assumes that the functioning potential of a person is fixed at or before birth. If a person's heredity is assumed as the causal factor, environmental influences should be explained by the same reason. Such factors as the family, peers, past experiences, the culture, and even the school itself as being related to the potential of persons as measured by psychological tests, achievement tests, aptitude tests, and other indicators of "potential" do not support this assumption. Also, the gap between functioning ability and ultimate potential is not explained. There is evidence to support the idea that functional intelligence indicates only speed or rate of learning rather than ultimate capacity. Much evidence suggests potential is a product of the individual and his past. Present knowledge of the distribution and randomness of inheritance suggests that it is impossible for most persons in one geographical area to have an inherited disadvantage, yet this very assertion is often made and supported by certain groups of people. Some teachers have decided there are students in their schools who cannot learn. Explanations of "why" often revert very closely to the extreme idea of associating potential and inheritance at birth. Several embarrassing questions can be asked of educators who tend to agree with the genetic or natural unfoldment theory of explaining who has disadvantages.

Assume that persons are born with certain determiners of actual potential or with heredity related to the development of potential on some type of continuum. If an innate intelligence continuum has persons at one extreme with inherited limitations, these probably fit another classification scheme called handicapped. However, even handicapped "deviates" require several continuum to classify them. Many handicapped persons are not at a disadvantage when comparing learning success, reading ability, being from an advantaged environment, or possessing positive self-concepts. Educational results of handicapped students indicate even an "inherited" handicap can be partly overcome. Major categories of the handicapped are classified as: mentally handicapped, emotionally handicapped, and physically handicapped with the hereditary aspect considered as having the most influence in the order listed.

Potentiality

Implications from statistical results with large number of plants and animals allow the association of many genetic characteristics with a normal curve or at least some type of distribution. Even if the ultimate potential of any one learner is limited by genetic restrictions, the experimental results with variable environmental factors assure us there is usually a large gap between the possible outcomes and the actual outcomes of growth, development, and productivity of organisms.

If undesirable inherited characteristics are labeled as handicaps to distinguish them from disadvantages, there is little use for the genetic explanation of poor performance by some students. It does little good to worry about heredity after an organism is alive unless we are considering reproducing them. Even theoretically separating the handicapped and disadvantaged essentially forces us to explain disadvantagement on a basis other than hereditary potential alone. Excluding persons with handicaps, a broad concept of disadvantagement might be any person not reaching his ultimate potential, whatever prevents him from doing so. We must examine the individual in his environment for factors which prevent utilization of maximum potential, and assume that education is a positive (or negative) part of this total environment. The problem becomes one of individuals with undeveloped capacities, not one without ultimate potential. Education may be a part of the solution or a part of the problem. Even symptoms are logical bench marks and can be used as indicators of successful programs.

The environmental extreme can be as optimistic as the hereditary one is fatalistic. Considered as a single cause of advantagement, all persons could be made alike by a controlled environment. The individual is neither born with limitations nor controls his own development. The psychological environment is assumed to be exactly the same as the physical one. Learning becomes adapting to a changing environment so the quantity and quality of experience becomes critical to the potential realized. Learning loses its psychological aspects of adapting to the changes in self as well as to the external world; learning is viewed only as an active process of sensory stimulation without regard to the feelings, understandings, and skills one already possesses.

Projections

The learning potential of persons with disadvantages has been underestimated. Test results should be considered as assessing minimal, not maximum, ability of students. Human potential, unlike other types, tends to be positive or negative and can be measured only by its present functioning. Even "unused" potential can be expressed in an undesirable way rather than being neutral or remaining undeveloped. Widening the gap between disadvantaged persons and advantaged ones is like setting a human time bomb, and explosive results may be some of the social problems we have today. If we choose improving the educational system to provide realistic, yet challenging, opportunties for all individuals as the alternative, the abeyant energy may be a boom to our ideals (rather than social ills). A positive contribution can be made to society, to families, to communities, and to individuals themselves. Potential, by its very nature, is latent power. It can be in the form of violence or vocations, of prosperity or poverty, of fulfillment or failure, and of productivity or destruction.

The Paradox

A program for the disadvantaged built on assumptions of either of the extremes discussed will likely fail — particularly the hereditary one. A new and desirable external environment will go a long way to help us educate students with disadvantages. However, previous undesirable experiences will continue to dominate the disadvantaged. Much depends on the persons themselves — —not their inborn heredity but their willingness to use what they have. Their low positive intrinsic motivation is a part of the educational problem (since it is very difficult to educate persons without it). The approach to get them to realize and utilize their potential must emphasize positive motivation.

Education is helping all people, of all ages, at all times, to be all they can and should be. The existence and variation of potentiality is a reality, and educators have the responsibility of identifying the potential level of attainment for each and every individual. We should exercise educational leadership by providing opportunity for each individual equal to his personal potential. Disadvantaged persons need assistance, even more than advantaged ones, to actually realize their potential for development, because a complex interaction of environmental and personal factors negates and limits their opportunities. Few educators take exception to the abstract concept of potentiality, but effective educational programs to make the idea operational do not exist for all of our clientele. Many programs are operated as if people existed for them whereas programs should exist for people. A process to liberate and free the potential within the individual may at the same time become an external restraint on his doing so. This is the paradox in which education finds itself with the disadvantaged. Even after nearly 200 years of existence as a country, the third report of the National Advisory Council on Vocational Education states: "The fulfillment of the individual potential is the country's historic mandate." Let us adjust to serve all students and not force students to adjust to us.

A CHALLENGE ACCEPTED

New approaches for disadvantaged and handicapped in North Carolina.

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The 1968 Vocational Education Amendments directed that each state develop programs for the disadvantaged. Federal funds from that same act were allocated to provide vocational education for handicapped persons. With the release of these funds, North Carolina moved to hire consultants to begin research and to develop programs within the State for the disadvantaged and handicapped.

Pilot Programs and Projects

During the 1969-70 school year *Programs for Disadvantaged Persons* were offered in sixty-six local administrative agencies with sixty-two teachers participating on a full-time basis and four hundred nineteen on a part-time basis. *Projects for Handicapped Students* were developed in thirty-two local educational agencies involving sixty-three teachers. Due to this effort, approximately 18,000 disadvantaged and 3,000 handicapped persons were more adequately served through vocational programs.

Evaluation

Efforts were made to determine the success of the programs and projects during the first year of operation. Evaluation instruments were designed to be used by individual teachers, curriculum committee members, administrators and others in assessing programs for disadvantaged and projects for the handicapped. This evaluative approach involved all of the local school units with special program efforts for the disadvantaged and handicapped.

A rating scale was developed to secure evidence of achievement on short-range and long-range goals. The instruments were designed to permit evaluators to record aspects of the program most satisfactory and most in need of improvement, steps for correction of weaknesses in the program and comments the evaluators wished to make.

The evaluators considered the first year quite successful. It was a year of learning, a year of many "trials and errors." Since no model was completely adaptable to all school districts, each program or project was fitted to the local needs.

The evaluators believed small classes geared to the specific needs and abilities of the students, with curriculum adapted to their particular abilities, were very rewarding. The students were able to develop self-confidence and a better self-image by competing on their own achievement level.

Students were given the opportunity of learning about the world of work by means of class discussions, films, film strips, field trips, laboratory work and field study. They profited from experiences in simple office procedures, trade and industrial laboratory work, occupational home economics training, agricultural laboratory and field work, and cooperative work experiences.

The programs were designed to permit maximum flexibility and adjustment to meet individual needs. Major components of the programs were:

1. Commonalities — major assistance with the development of positive attitudes, personal adjustment and realization of "self-potential" — a better understanding of the world of work and the need for acceptance of responsibilities.
2. Modules of learning — each program was designed to provide individuals and small groups with training to meet their specific needs. In many cases, several different exploratory and/or skill areas were taught by one teacher during one class period.
3. Work experience — many students were placed in the field for "on-the-job-training" — placement for in-school and out-of-school work experiences was based on three factors:
   a. the pupil's degree of readiness to be placed,
   b. the availability of suitable training stations, and
   c. the capability of the occupational instructor to place the pupil.

Teacher recommendations for improving the programs were:

1. more professional education for teachers working with disadvantaged and handicapped persons
2. more equipment and supplies
3. smaller classes with longer class periods
4. better procedures for identifying disadvantaged and handicapped students
5. more help from supportive services such as welfare, tutoring services and cooperation with the Employment Security Commission, Special Education and Vocational Rehabilitation.

Evaluators expressed the need for a continuing program throughout the summer months.

Summer Programs for Handicapped

Approximately five hundred children attended *day camps* held in four different locations across the State. Each of the four programs were funded from a combination of monies from the 1968 Vocational Amendments, the Elementary and Secondary Education Act, and State and local resources. In no way were funds commingled; however, the total program was planned and funded jointly.

Children between the ages of seven and sixteen from the rural mountain counties of the Appalachian area, central and eastern parts of North Carolina were involved in day camps held for handicapped students. Basically, these camps were designed for the mentally retarded. Students participated in extensive programs of recreational and physical development. They were instructed in basic skills of arts and crafts. A strong component of each program was vocational exploratory work which was coupled with communicative skills and personal adjustment. Exposure to music, group singing, dancing, band instruments and dramatics, short plays and pantomine helped round out desired behavorial outcomes. Emphasis was given to bridging the gap between the several educational disciplines which included vocational education.

By observing and keeping detailed records on classes and activities, the day camps provided valuable opportunities to improve instructional programs for mentally retarded children across North Carolina. In-service training was provided for special education teachers, vocational education teachers, graduate students and "academic" teachers. They were given an opportunity to work with children in classrooms, laboratories, on field trips, and in recreational activities.

Summer Programs for Disadvantaged

A *Youth Opportunities Program,* established in three experimental rural training centers, was developed by working jointly with the North Carolina State Department of Public Instruction, North Carolina Department of Community Colleges, North Carolina Manpower Development Corporation, and the local education agencies. The program was jointly supported by vocational funds from the 1968 Vocational Amendments and by the North Carolina Manpower Development Corporation.

Each program was designed to equip disadvantaged youth who were school dropouts or high potential dropouts with skills for (1) entry into the world of work, (2) to return or remain in school, (3) or enroll in a technical institute or community college. Major components of the program were individual and group counseling, human resource development, and vocational training. One hundred twenty students participated in the program.

One hundred three disadvantaged persons participated in a three-week camp held in Swanboro, North Carolina for high school dropouts and potential dropouts in an effort to reclaim and expand their hidden talents. This program was directed toward getting school dropouts back in school or on a job, and holding the potential dropouts in school.

The camp was set up for a unique group of individuals and unique approaches to meet individual needs were required. Communication and computational skills were interrelated during the development of occupational and vocational skills.

Parents were encouraged to become involved in the camping program to develop a better understanding of the public school educational process and the opportunities available to their children during the next school year.

Social competencies were enhanced by participating in experiences in personal grooming, attitude development, field trips, dancing, singing, skits, and recreational activities.

Two teachers guided the experiences of thirty disadvantaged students in a *summer tutoring program* offered in Beaufort County. Curriculum emphasis evolved around the integration of math, science, and language arts with vocational education.

Teacher education institutes for over 200 full-time and part-time teachers of disadvantaged and handicapped students were held at North Carolina State University, North Carolina Agricultural and Technical University and East Carolina University. The programs were designed to help participants identify the disadvantaged and handicapped and diagnose the students' special educational needs. Efforts were exerted to develop a better understanding of supportive services from other educational and non-educational agencies and train the participants to solicit and secure those services.

Occupational Education personnel, as well as representation from Social Services, Special Education, Vocational Rehabilitation, General Education personnel and Pupil Personnel Services, were involved in planning and developing the institutes. Institute participants came from these same agencies and departments to enable the participants to develop better working relationships between all educational and related disciplines. Through the use of audio-video tapes, demonstrations, teacher-group study, research, participation with on-going summer programs for disadvantaged and handicapped, this in-service training was different from any other in-service offered in prior years.

Since no one area of work is best suited for the disadvantaged and handicapped, participants in the institutes were involved with curriculum planning and development across the board in occupational education.

Participants came from educational agencies located in urban and rural areas. Emphasis was placed on working with disadvantaged and handicapped students who reside in both areas. However, specific attention was given to students from inner-city ghettos and extremely rural, isolated areas of the State.

The handbook, *Evaluating Disadvantaged and Handicapped Students for Planning Occupational Education Programs in North Carolina,* was developed for use by public school educators across the State when attempting to identify students with special needs, diagnose specific causes and plan educational programs to meet these unique needs.

It is hoped that the use of the Handbook will lead educators to develop more flexible programs allowing *all* students as individuals to be educated according to individual differences and needs. Only in this way can these students develop into useful, productive and happy citizens.

Teaching to meet the needs of students is a challenge; but, reaching, touching and teaching the disadvantaged and/or handicapped persons presents a greater challenge to the dedicated educator.

MONTANA LOOKS AT THE EDUCATIONAL NEEDS OF HANDICAPPED AND DISADVANTAGED

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and

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Until recently it had been hypothesized by supervisors and teacher educators in agricultural education that a number of handicapped and disadvantaged students were enrolled and being served by high school vocational agricultural education programs in Montana.

Teachers of vocational agricultural education, however, lacked incentive or available resources to offer separate or special programs to students identified as needing special assistance. If programs were to be offered it was essential to determine the degree to which students were successfully participating in present vocational agricultural education programs. Vernon Luft, graduate student in Agricultural Education, initiated a study to:

1) quantify the numbers of handicapped and disadvantaged students enrolled in the vocational agriculture program in Montana.
2) determine to what degree disadvantaged or handicapped students are being served in programs of vocational agriculture in Montana.
3) determine if existing vocational agriculture programs can be designed to accommodate the needs of the handicapped or disadvantaged in terms of gainful employment or continuing education upon completion of the program.

Number and Characteristics

All sixty departments of vocational agriculture in Montana received a survey questionnaire. Of the 7,481 students enrolled in the 53 high schools reporting, 2,364 students were enrolled in the vocational agriculture program. Four hundred and fifteen (415) of those enrolled in agriculture were considered to be handicapped or disadvantaged or have a combination of both. A total of nine hundred ninety-three (993) handicapped or disadvantaged students were in the total high school enrollment. Four hundred fifteen (415) of this total number of disadvantaged or handicapped were enrolled in vocational agriculture classes. A breakdown of these 415 students showed that 92 (22.2%) were handicapped, 173 (41.7%) disadvantaged and 150 (36.1%) were identified as being both handicapped and disadvantaged.

Agricultural instructors reported a wide array of combinations of handicaps and disadvantages. The most frequently occurring handicap was the slow learner. Hearing and chronic illnesses ranking second and third respectively.

Although it was difficult to synthesize the disadvantages, home environment and academic deficiency were the two most often agreed upon disadvantages among the students enrolled in vocational agriculture in Montana.

It was hypothesized there would be students with combinations of handicaps and disadvantages. Of the 150 students identified in this category combinations of slow learner and academic deficiency and slow learner, academic deficiency and home environment prevailed.

Where, in the program are the handicapped and disadvantaged students? The data revealed that slightly more than 40 per cent of the freshmen had combinations of both handicaps and disadvantages. Approximately 50 per cent of the sophomore students and 40 per cent of the junior and senior students were reported to be affected by a combination of handicaps and disadvantages.

To program planning purposes it becomes meaningful to look at the age categories of vocational agriculture students who were handicapped, disadvantaged, or had combinations of both. Nineteen, or 22.9 per cent, of the students with only handicaps were reported to be 18 years old, as opposed to 4.8 per cent of them being 19 or older. The fifteen year old age group was reported as having the highest number of disadvantaged youth. The sixteen year old age group was reported to have approximately 25 per cent of the students with both handicaps and disadvantages.

How serious is the problem of the handicapped and disadvantaged student? The respondents reported that 57 per cent of the students with only handicaps would not be hindered in the regular program by their impairments. A further analysis of the data indicated that 58 per cent of the students with only disadvantages would experience difficulty in the regular program while 76 per cent of those students with a combination of handicaps and disadvantages would be hindered by their personal problems.

Identification

The respondents were asked to indicate the basis upon which they identified the handicapped and disadvantaged vocational agriculture students. Forty five (45) respondents indicated they identified the handicapped and disadvantaged on the basis of personal judgement. School performance was the basis of identification used by 36 respondents. In thirty-one schools the guidance counselor assisted in identifying the handicapped and disadvantaged students. Only one respondent indicated that an employer helped to identify the handicapped and disadvantaged students in vocational agriculture.

In those schools where efforts were being made to provide programs for the handicapped and disadvantaged, 37.9 per cent were identifying the students at the high school level, 22.5 per cent at the junior high level and 34.5 per cent at the elementary level.

Program Changes

To determine if the existing vocational agriculture programs in Montana should be changed to accomodate the handicapped and disadvantaged student, several questions were asked of those teachers who were not currently making any effort to provide special programs for the handicapped and disadvantaged.

Half of those teachers who were not providing special programs for the handicapped and disadvantaged reported their programs could be modified to accommodate such students in their respective schools.

Those instructors offering special programs were asked to explain the kind of program they believed could be offered in their school for the handicapped and disadvantaged. Four indicated special in-service shop work should be offered. Three respondents throught students identified as having special needs should be in separate classes thus not having to compete with regular students. Two teachers suggested working with special needs students on an individual basis.

Conclusions

1. The largest number of handicapped and disadvantaged vocational agriculture students in Montana are in the freshmen and sophomore classes or among the 14 to 16 year old age group of students.
2. Few students from minority groups are enrolled in programs of vocational agriculture in Montana.
3. Handicapped and disadvantaged students are being identified at the elementary, junior high, and high school level; however, they are more commonly identified at the high school level.
4. Limited efforts are being made in Montana to provide vocational agriculture programs for handicapped and disadvantaged students; however, special help is given on an individual basis by the vocational agriculture teacher. The individual help, however, is not unique to that offered any other student in the class.
5. Teachers of vocational agriculture have not prepared courses of study for special programs for the handicapped and disadvantaged.
6. Cooperative work experience programs were limited for the handicapped and disadvantaged vocational agriculture students because of the unavailability of training stations.
7. Few local departments of vocational agriculture have used available federal funds for programs for the handicapped and disadvantaged students.
8. Instructors of vocational agriculture in Montana indicated their programs could be changed to accommodate the needs of handicapped and disadvantaged students; however, they believed intensive in-service training would be essential before any changes were made in their program.

News and Views of NVATA

JAMES WALL
Executive Secretary

OUTSTANDING MEMBER WILL GO TO EUROPE

Geigy Agricultural Chemicals has announced that an outstanding NVATA member will join with members of several other agricultural organizations on a 10 day tour of Europe in July of 71. Application forms are being printed and will be mailed, in bulk, to the person designated by each state association president. The designated person will be responsible for sending a form to each NVATA member. While all members are eligible to apply, those with more years of experience and especially those who have been active in the professional organizations will have the advantage. However, every member should be sent a form to make him more aware of NVATA activities.

NVATA OUTSTANDING YOUNG MEMBER AWARD

United States Steel Corporation is again sponsoring the NVATA Outstanding Young Member Award Program. All members of NVATA who have taught Vocational Agriculture at least 3 but no more than 5 years are eligible to enter the contest. Each of the 6 Regional Winners will receive an all-expense paid trip to the Portland Convention in December. State winners will receive certificates. Entry forms were mailed to state association presidents from the National Office on *January 19*. It is the responsibility of the association president to provide each eligible NVATA member in his state with a copy of the form.

NVATA CAREER ORIENTATION AWARD PROGRAM

New Holland Division of Sperry Rand Corporation is again sponsoring the NVATA Career Orientation Award Program. Application forms will be mailed to all NVATA members by New Holland within the next few weeks. State Associations should encourage members to enter the contest.

Each of the 6 Regional Winners will receive a trip to the Portland Convention with all expenses paid. Certificates will be provided for State winners.

AIC AWARDS

The American Institute of Cooperation is providing $2,000 to be divided among the four top FFA Chapters in Cooperative Activities. The prize money must be used to defray expenses to the American Institute of Cooperation in Fort Collins, Colorado August 1-4, 1971. Application blanks are available from your State Supervisor of Vocational Agriculture. The four National Winners will *not* be selected by Regions this year as in the past.

FINDING TEACHERS OF AGRICULTURE FOR THE 70's

Ralph J. Woodin
Chairman of the Professional Personnel Recruitment Committee of the Agricultural Education Division, AVA and Professor of Agricultural Education
The Ohio State University, Columbus, Ohio

A new confidence in Agricultural Education was apparent at the New Orleans Convention of The American Vocational Association. New goals for programs in Agricultural Education for the 70's were discussed by the National Vocational Agriculture Teachers Association and by professional groups representing teacher educators and supervisors. Although these goals reflect a commitment to expansion and revitalization of Agricultural Education they can be realized only if an adequate supply of high quality teachers is available.

The respect enjoyed by Agricultural Education in the public schools has been a direct result of developing an adequate supply of high quality teachers. Although in times of shortage there is a temptation to compromise on quality, this has not been the case in Agricultural Education. Even though there have been serious shortages of teachers during the past five years less than 3% of agricultural teachers in the nation last year held temporary or emergency certificates.

Studies of supply and demand for teachers of vocational agriculture have been made each year since 1965 as a guide to a national recruitment effort.[1] 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 state supervisors in each state and teacher educators in 77 colleges and universities preparing teachers of agriculture.

A Record Crop of Graduates

A record 1,700 persons were qualified for teaching vocational agriculture in the United States in 1970. This 70% gain in teacher supply can be attributed in a large measure to the planned, united recruitment effort which has been made by the profession during the past six years.

The percentage of Agricultural Education graduates whose first occupation was teaching vocational agriculture has decreased consistently in the past six years, from 64.6% in 1965 to only 51% in 1970. This low percent of persons entering the profession makes the task of recruitment greater. It has been attributed to the availability of employment in a wide variety of agricultural areas and also to the effect of the Asian war and services in the Armed Forces.

The high rate of turnover continues to add to the demand for teachers of vocational agriculture. Last year's turnover of approximately 10%, has been quite consistent and compares closely with that of other groups of teachers.

Number of Positions Stabilized

A comparison of number of teachers of vocational agriculture in the nation over the past six years shows that the number has stabilized just short of 11,000 positions, although supervisors predict 12,347 positions by 1975. Since 1965, as shown by the accompanying table, the number of positions has ranged from 10,221 in 1967 to 10,560 in 1969. This does not include 782 positions in Technical Institutes and Community Colleges.

Although the number of positions in the nation has remained quite constant for the past several years there was considerable variation from state to state. During the past six years a number of states have shown steady and consistent growth but this has been offset by other states which had reductions in numbers of teaching positions. These reductions have generally taken place in states which have been involved in extensive school consolidation programs.

Last year the four states with the largest gain in numbers of teaching positions were Ohio with 55, Minnesota with 42, Texas with 23, and Florida with 16.

Comparative Enrollments in Agricultural Colleges and in Agricultural Education

It would appear that there should be a close relationship between the number of agricultural teachers enrolled in agricultural colleges. A comparison of these enrollments is shown in Figure 1. This graph shows that the percent of enrollment in Agricultural Education as compared to Agricultural College enrollment has remained about constant since 1965.

Finding Teachers For The 70's

If the past is a prelude to the future then the problem of finding an adequate supply of teachers of vocational agriculture will continue during the 70's. While a continuation of the present recruitment effort on the part of the profession can do much to meet the situation it would appear that recruitment must be supplemented by other efforts to make use of qualified persons.

The following recommendations are supported by previous experience of the Professional Personnel Recruitment Committee for Agricultural Education in meeting teacher needs in vocational agriculture:

1. The program of encouraging vocational agriculture teachers to recruit some of their best students for teaching vocational agriculture should be continued. The results of this effort during the past six years has markedly increased the supply of teachers.

2. An effort should be made to place a higher percentage of those qualified. In a highly competitive job market it would appear that students who graduate at different times of the year should be offered opportunities in teaching and that a carefully planned and systematic approach to placement should be made. Efforts should be made to make salaries of teachers competitive with other fields which they might enter.

SUPPLY AND DEMAND OF TEACHERS OF VOCATIONAL AGRICULTURE 1965 - 1970

Year	Total No. of Positions	Teachers Needed But Not Available August 1	Total Qualified for Teaching	Percent Qualified Entering Vo-Ag Teaching
1965	10,378	120	1,038	64.6
1966	10,325	162	1,151	61.4
1967	10,221	232	1,233	60.2
1968	10,606	141	1,314	61.6
1969	10,560	121	1,566	56.9
1970	10,520*	171	1,700	51.0

*The figure for 1970 does not include 782 teachers of agricultural technicians in technical institutes, community colleges and similar institutions.

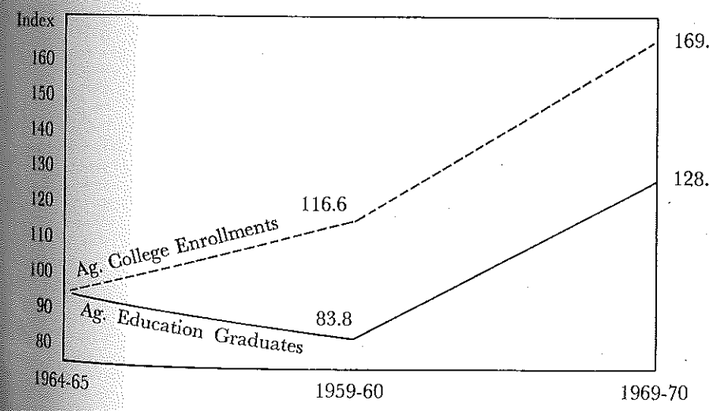


Figure 1 Comparison of Agricultural College enrollments and numbers qualified for teaching vocational agriculture.

3. In addition to recruiting their own students of vocational agriculture, teachers may be effective recruiters of carefully selected persons from the agricultural industries who may be especially useful as teachers in the specialized programs. Many of these persons hold degrees from Colleges of Agriculture and may need only professional courses in order to fully qualify them for teaching.

4. The holding power of the teachers position must be increased. If the percent of turnover could be reduced from its present level of 10% it would not only supply more teachers, but would tend to hold some of the best teachers who may be leaving for other positions.

5. Supervisors and teacher educators need to make efforts to recruit across state lines. It is interesting to note that only 113 of 1,700 persons qualified in Agricultural Education took positions in another state. It is also worth noting that 618 qualified persons were employed in some field other than teaching vocational agriculture. Some states had considerable numbers of teachers who were employed in fields other than teaching vocational agriculture last year. Among them were Texas with 152, Illinois with 59, Mississippi with 40. Such states might offer opportunities for other states with shortages of teachers.

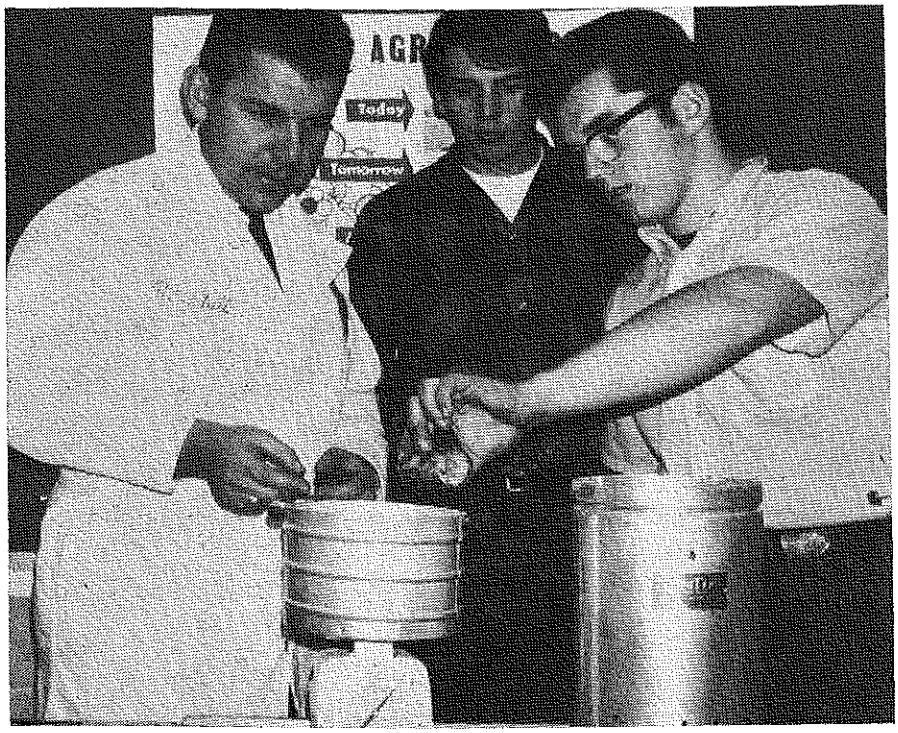
6. A goal of qualifying 1,800 persons each year for teaching vocational agriculture should guide recruitment efforts. Such a goal was recommended by the Advisory Committee of the Agricultural Education Division of the American Vocational Association in 1969. This now appears to be a realistic goal which is close to being realized and probably can be met next year.

A word of caution may be raised in terms of going beyond this goal. Certainly there needs to be a balance between supply and demand. It would appear, however, that by following the recommendations given above and preparing and qualifying about 1,800 teachers per year that the needs of Agricultural Education in the 70's may be met.

[1]A copy of the study reported in this article, "Supply and Demand for Teachers of Vocational Agriculture in the United States for the 1969-70 School Year," may be obtained from the author.

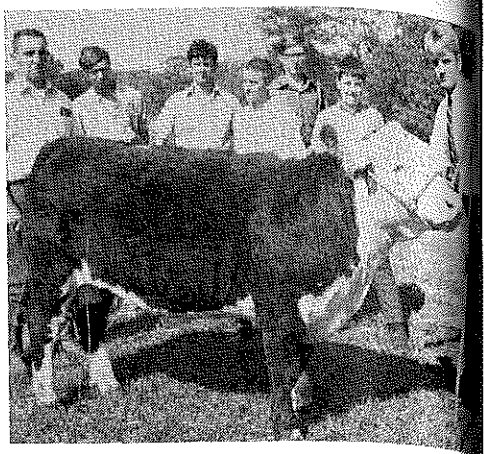
Stories in Pictures

ROBERT W. WALKER
University of Illinois

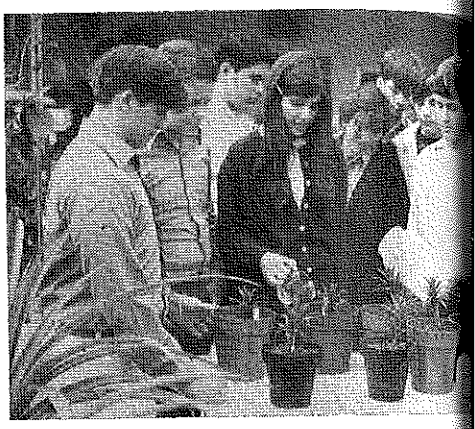


Students at Walkersville High School, Maryland checking shelled corn samples for moisture. The vocational agriculture instructor, Paul Stull, explains the need for proper moisture in grain to insure quality harvesting and storage. (Photo by James Pope, Maryland Department of Education)

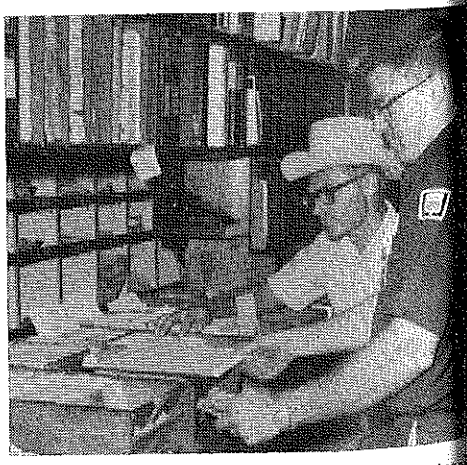
This six-man committee met at the National FFA Center in Alexandria, Virginia, to discuss changes in the FFA *National Chapter Award Program*. Standing, left to right: Dennis W. Torrence, Vocational Agriculture Instructor, Appomattox, Virginia; Harry Schnieber, Vocational Agriculture Instructor, Belvidere, New Jersey, and Paul Day, State Supervisor, Agricultural Education, State Department of Education, St. Paul, Minnesota. Seated, left to right: Harold W. Sullivan, Program Specialist, Vocational Agriculture, State Department of Education, Charleston, West Virginia; Billy L. Conner, State FFA Executive Secretary, Texas Education Agency, State Board of Education, Austin, Texas, and Clifford L. Nelson, Associate Professor, Department of Agricultural & Extension Education, University of Maryland, College Park, Maryland. (Photo from The National FFA Center)



David Lee (right), student teacher, Pataska Ohio, conducts a judging exercise at a local fa prior to the selection of steers by two member the class for their vocational agriculture proje (Photo by Bruce Baird, Vocational Agricul teacher, Pataskala, Ohio)



Horticultural students experiment on Easter using the chemical, phosfan, as a height retard (Photo by C. C. Beam, Vocational Horticul Instructor, Herndon, Virginia)



A South Dakota vocational agriculture tea Bob Johnson, left, learns the parts filing syste a machinery establishment as part of an in-se internship workshop conducted by South Da State University, July 20-27, 1970. (Photo H. W. Gadda, Professor, Agricultural Educa South Dakota State University)