A former vocational agriculture student who has been established in farming for the past 15 years in the Honeyfield, Oklahoma area, is visited by a state vocational agriculture staff member. Jack Todd is president of the Young Farmers Association of Oklahoma. Donald D. Hinson is district youth supervisor and consultant to the Young Farmers 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 past year's program of the South Dakota Agriculture Teachers Annual Conference, August 3-4, 1970. (Photo above by H. W. Godbey, South Dakota State University)

Floriculture students learn disbudding and selecting chrysanthemums from their horticulture instructor, C. C. Beem, Shenando, Virginia. (Photo left by C. C. Beem)

AGRICULTURAL EDUCATION FOR THE DISADVANTAGED
Agricultural Education for the Disadvantaged

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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 use 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 do not really have any clear idea of the needs and abilities of the youth of today and the adults of this country. Historically, agricultural education has been concerned with youth who had no academic opportunities based on their abilities. Studies concerning disadvantaged students reveal characteristics common for learning as well as social, cultural, educational, 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 must know his students, he must understand the psychological theories of learning, and have at his command a full bag of tricks, but unless he honestly cares about students, little can 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 as particular individuals felt "left outside" by the educational establishment, refused to become dropouts, but because of some recognition, approval or reward by a teacher, who in some way, made learning meaningful 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 winter of the contest wrote one student: "I like my teacher because he makes me feel important. Thar's huge 'cause I've been invaluable 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, won an award for producing a prime animal, or was a teacher who makes a student feel important. That is something about 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. The communication that is to be effective must be so clear that no further learning will be meaningful and acceptable. We must keep in mind that the message to be communicated will be effective only when there is proper communication 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 stages of the program, we have observed educational programs that were based on what is currently referred to as "differentiated instruction." It provided for individual students through activities that might be labeled "differentiated assignments," "differentiated methodology," "differentiated analysis," or "differentiated evaluation." Instruction in vocational education must focus upon the problems, interests, abilities, and the needs of each student. We utilize students to teach other students, with educational gain for both; adapt instructional materials to abilities of students; and have students evaluate and judge the importance of each individual rather than upon total achievement, some norm established by a class or set by a teacher. This psychology is an integral part of education, and it is a step in the right direction in dealing with the disadvantaged of the present as it has had in the past of the history of education.

The fourth point is expectations. In agricultural education we cannot overlook expectations which we have of the disadvantaged, neither can we overlook the expectations we have of the participating student. Should expectations be realistic? Should failure be accepted; that success conditions students to expect failure. Motivation is associated with incorrect real challenge to agriculture education is a thing for teachers direct students, particularly the disadvantaged, to success experiences.

Finally, a look at editing and grammar and content and course content, this is closely related to the points already mentioned, but it is important enough for re-mention. What must students learn content related? How can teachers enable students to see a relationship between what they are "taught" and their own daily lives and agriculture? To answer these questions suggests there must be more and more content relevance to the instruction. "The home project" as provided in the Smith-Heill Act of 1917 offered a challenge for relevance in agriculture. Projects have been extended to the concept of relevance to provide for a comprehensive laboratory experience for the instructional project. It was through the varied types of activities of this project teaching that permitted, even required, the instructor content to be differentiated, based on the interest, problems, and goals of students. Occupational experience, when it is a home project, a simulated project, or other experience which provides realism to the learning, the course content must be expected to become more related to the teaching that is not suitable to cultivate. Nature trail is being developed on a twelve acre woodland on the farm.

Proposed Program

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

First, we find that the student we did not adapt to the conventional classroom situation display an academic, socio-economic, cultural or other handicap. The characteristics which make this program different from most conventional programs are:

1. Teaching specific skills which could be used in gainful employment.
2. Provide opportunity for students to develop responsibility, cooperation, initiative in learning, and pride in their work.
3. Provides opportunity to develop work habits.
4. Shorten class periods in contrast to regular periods.
5. A minimum of fifteen students in a class in contrast to the present average of thirty-five students in VOs.
6. Employment of an aide to assist in 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 plant science or applied animal 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 courses during his sophomore year. The Practical Agriculture I course outlines 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 student is expected to become more skillful and demonstrate more responsibility in performing the skills. It is planned that they will have studied and examined the student 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 imaginative.

This person performs the following duties:

1. Assist the vo-ag instructor in preparing for classroom presentations. This could include ordering materials, helping with outdoor equipment, setting up demonstrations.
2. Assist in grading for field tests and field experiences.
3. Assist in major responsibility for practical work experience during the period that it is not in the classroom.
4. Assumes major responsibility in exploring potential occupations.
5. Do activities of aide applicable to the curriculum as defined by the Teach-Aide Handbook of Grant Public Schools.
6. Assist the instructor in evaluating students and the program.

Vern Bulletin, teacher aide, helps Luis Rodri- guez with one of the Bliss cows on the school farm. Other livestock enterprises include hogs, brothers 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 insures each student for end of 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 student majoring in wildlife and forestry at Oregon University was employed forty hours per week to supervise the students. In addition to the help provided by the student, this experience was beneficial to the professional preparation of this vocational agriculture teacher.

**Funding**

Twenty percent of the finances for the program came from local sources while eighty percent 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, purchase of miscellaneous hand tools, etc.

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

**GOALS**

We as teachers, must have goals. We know what we want to achieve. We have goals to help us where we are going, where we are going to go.

What are your goals as a teacher? How do you test how and why? Are your goals well thought out? Are they realistic? Are your goals for the teacher next door? Are your main goals for your teaching; but the goals must be properly centered.

What is your current teaching? Let's provide student-centered teaching and not teaching centered around socializing with students. Let's provide student-centered teaching and have the students work for themselves, our programs and courses will benefit. If our teaching is to be student-centered, it is the teaching of the teaching of the student, and we accept the idea of teaching individual students to choose rather than teaching them to think exactly as they think. We cannot change our teaching and have it be student-centered, we must accept the idea of teaching individual students as chosen rather than teaching them back for teaching back. We must change our teaching methods and we must be alert to these changing requirements.

We must stay away from faulty and dangerous assumptions which prevent professional and understanding understanding of student. We must change the student to such questions as:

1. **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. Boys and girls 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. Vulgarity, crime, and suicides are stern reminders of something that has gone amiss.

   Too often teachers and others have reinforced a negative concept. Back the child says to himself, "Great Fatig, vocational agriculture teacher in the public school system. Fifteen acres of corn were planted and tended by the students.

   Most of all, we must make the goals for disadvantaged students to be something different than the goals for regular students. First, all goals must make sense to the student in light of his background and experiences at school. At first, the goals for him must be:

   1. **SHORT term goals, something for next year or you grow up, or for today or this week.**
   2. Some short term goals must include part-time job for money to do a littleographing, saving a little money, learning a simple motor skill.
   3. Early and orderly goal setting does not make one critical for realistic exploration and assisted by students.

   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, the one area over which teachers have considerable control. We can help make school a place where the boy or girl feels five, work and happy. We must 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 family and teachers are against, or at least not interested in actively support school attendance and achievement for their children. Sometimes the disadvantaged students do not have a supportive family relationship. Teachers have opportunities to influence the family environment. We can confer with and inform parents. We have an opportunity to influence family members' attitudes toward school success in projects, youth organizations, school work, and work experience programs. Maximum success in the classroom with disadvantaged students requires family involvement and family support of the goals and aspirations of the student.

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

   **EXPLORATORY INSTRUCTION**

   As vocational educators, we have a unique role to play in exploring instruction regarding career opportunities. The key to this is: to provide an isolated "career" in some course. Here is an opportunity to really teach — not just give a career.
RURAL EDUCATION — DISADVANTAGED YOUTH

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 1963 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 Deprived 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 second-grade 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. Deciding 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 operating schools in the form of supplies, materials, specific guidelines, and program evaluation.

Prior to conducting the vocationally oriented family-centered educational programs in a local school, specific training was given to the teachers of agricultural education to (1) identify disadvantaged rural families in the community, (2) establish support between the teacher, family members, and (3) work with families to cooperate by participating in the educational activities. Personnel activities consisted of the teacher as a part of the initiation and content of the educational program was necessary to gain the cooperation and cohesiveness of both adults and children.

Teaching Procedure

Family members, adults and children over twelve years of age, in the perennial educational program were encouraged to attend 12 group meetings conducted monthly. The goals of the meeting centered around the educational activities. The teacher generally followed the program provided in conducting the educational activities, but adapted the plan to meet the needs of his group. The home of each family enrolled in the school, but the teacher for conduct meetings in homes or in the school, (7) received social club, (8) leisure time, and (9) school attendance and grades.

At the end of the program, the students were given a written test to determine the effectiveness of the program. The test reviewed the previous program and related the information covered to the particular family situation. In addition, the students were asked to describe problems they could help with and motivated the families to attend the next group meeting.

During group meetings and the following 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.

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 collection instruments included measures of (1) potential desire for their children's education, (2) educational and organizational assistance given to the children, (3) situations and goals of the family, (4) situation and goals of the family, (5) the home and its surroundings, (6) the farm and its surroundings, (7) the farm and its surroundings, (8) leisure time, and (9) school attendance and grades.

1. Children in the experimental group had specific educational goals, were able to estimate the end of post-secondary education, desired the rural area or small town for the location of their life-time work, knew the way of life, and expressed an interest in the success of the family, (5) the home and its surroundings, (6) the farm and its surroundings, (7) the farm and its surroundings, (8) leisure time, and (9) school attendance and grades.

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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 professionals to provide with a minimum of specialized preparation. The experimental groups receiving the educational program were significantly different at the end of the project in several dimensions from the control group. This 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 research report of the project will be available on microfiche and will be listed in ERIC.
Making Agriculture Relevant For the Disadvantaged

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 Economics.

Since about 20 per cent of the more than 57 million rural population do not live on farms, local vocational agricultural 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 the money needed to include the "obscure" 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 programs based on those needs". However, there are a few new applications 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, economic, etc. We must detect special problems of the disadvantaged, such as (1) difficult attitudes, (2) lack of self-confidence, (3) lack of set, (4) lack of guaranteed employment, and limited perception of the value of education, (5) short attention span, (6) lack of recognition, (7) lack of interest, (8) lack of self-confidence, and 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 with or without any derogatory remarks made by them in regard to their culture. It is imperative that we gain the confidence of these individuals, otherwise, our method will not work. The main thing is, is there a problem and what needs are not being met by observation and surveys in our program?

PROCEDURES FOR STEP I:

1. Develop a sympathetic attitude toward disadvantaged individuals.
2. Become familiar with understanding of the individual's problems and deficiencies which prohibit them from making the most of his capabilities.
3. Gain an insight of the student's concept of himself and the place in which he lives.
4. Develop an understanding of the student's concept of himself and the place in which he lives.
5. Develop self-confidence of the student's concept of himself and the place in which he lives.

6. Conduct surveys in a gainful occupations affecting the disadvantaged.
7. Interview disadvantaged persons for the problems affecting them.
8. Use student Perceptions Inventory to determine deficiencies of the individual's concept of himself and the place in which he lives.
9. Use Vocational Interest Inventory to determine deficiencies of the individual's concept of himself and the place in which he lives.
10. Use the existing educational system to determine the student's concept of himself and the place in which he lives.

Develop and Implement a Program

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

Emphasis should be placed on planning classes, explaining the value of work, in junior high school, in the classroom and in practical occupational training. These programs should be available to all students, especially to those who are not interested in farming and are interested in the non-farm ways of life. The program should include the following objectives:

1. To provide for individual differences in the learning of basic instruction, social skill practice, and social skill practice.
2. To train students in the understanding of their own abilities and their own interests.
3. To train students in the understanding of the student's concept of himself and the place in which he lives.
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The above procedures are not specific but are designed to be used in the program development process. When the individual student is placed in a program, the teacher should be able to devise a specific program to meet the needs of the individual student.

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

Methods:

1. Individualized Instruction — Use this method to accomplish the performance objectives, by bridging the gap between classroom instruction and the actual job.
2. Multiple-Choice Approach — A variety of visual aids usually are used, especially if they represent real life situations and are adapted to the unit.
3. The System Approach — The students are required to make one performance objective before moving to the next objective, in an effective method of teaching skills.
4. The Four-Step Method — The teacher (1) motivates the student, (2) demonstrates the skills, (3) has the student practice, and (4) checks to determine whether the student has met the performance objectives, through the procedure at a strict pace, through the procedure at a strict pace, through the procedure at a strict pace, through the procedure at a strict pace.
5. The Whole Method — This method allows the instructor to use a wide variety of techniques given the student an idea of how each part fits into the whole. Since disadvantaged students are impatient, this method avoids probing along on a small part of the process, the student can have a strong, clear idea of what each trade school or industry represents.
6. The Part Method — The instructor takes the whole method and breaks it into parts, with each part being taught separately and in a specific order.

Develop and Implement a Program

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

Emphasis should be placed on planning classes, explaining the value of work, in junior high school, in the classroom and in practical occupational training. These programs should be available to all students, especially to those who are not interested in farming and are interested in the non-farm ways of life. The program should include the following objectives:

1. To provide for individual differences in the learning of basic instruction, social skill practice, and social skill practice.
2. To train students in the understanding of their own abilities and their own interests.
3. To train students in the understanding of the student's concept of himself and the place in which he lives.
4. To train students in the understanding of the student's concept of himself and the place in which he lives.
5. To train students in the understanding of the student's concept of himself and the place in which he lives.
6. To train students in the understanding of the student's concept of himself and the place in which he lives.

The above procedures are not specific but are designed to be used in the program development process. When the individual student is placed in a program, the teacher should be able to devise a specific program to meet the needs of the individual student.
Programs For Students with Special Needs

The Vocational Act of 1963 provided for developing programs in vocational education for special needs students or disadvantaged students. The 1960 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 was conducted to provide vocational educators in agriculture and administrators with information which could be utilized in the development of appropriate programs 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.
5. To determine how well the programs were accepted by special needs students, their 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 date 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 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 secure employment in firms utilizing persons with agricultural mechanics competence.

Both teachers and administrators agree that special needs programs have decreased but not eliminated the drop-out 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 ascribed the curriculum for their special needs programs as being off-track regular agricultural mechanics instruction. Curriculum materials or subject matter were developed for the program simplifying ideas from existing courses. Some teachers indicated they used charts and diagrams to compensate in their special needs class. Both teachers and administrators ascribed curriculums as being poorly oriented and skill-oriented, with greater emphasis placed upon skill training. There were, however, programs which utilized both academic education in the curriculums. Programs generally provide a three-hour block of time for one week 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 information other than one-half of the teachers or administrators could name one source.

Teacher Characteristics

The formal education level of teachers ranged from the 12th grade to 4-year college. The majority of these college bound students were educators in agricultural education or industrial education. It was said that surprisingly few teachers involved in vocational organization in which they actively participated.

Most teachers reported having more years teaching experience in a field related to their special needs area such as farm equipment design, livestock equipment design, auto mechanics, farm business, and extension work.

Teachers also reported generally having taught a few in recent 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-Assessment of the Program

The self-appraisal of the agricultural special needs programs made by teachers and administrators revealed that students rated the programs higher than the administrators. The specific aspect of the program receiving highest rating by students 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 communication 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 some teachers had 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 programs 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 benefit in more equipment, machines, and work experience were provided. Generally, teachers and administrators felt additional professional training should be offered for the special needs students.

Very few teachers had written goals and objectives for their programs, 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 facility, 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 merchandising) in special needs programs.

7. Specific selection criteria should be developed.
8. Teachers, administrators, and guidance personnel should work closely in the operation of the special needs programs.

9. Non-certified 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. Training should be provided and facilities should 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.

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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, academic, and vocational performance of the academically handicapped students.

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 in the same schools enrolled in regular agriculture programs.

FINDINGS

What specific 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 principals and the vocational agriculture teachers who conduct the AWE programs considered it the primary purpose of these programs was to use instruction in agriculture as a vehicle to stimulate students academically and to prepare them for entry into occupations requiring knowledge and skills in this area.

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 efforts 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.

4. The curricula of the programs were generally unstructured. Curriculum materials used in the AWE programs consisted of instructional materials developed by individual teachers or selected from published material, and Occupational Work Experience, Cooperative education, and Cooperative work experience programs as defined 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 majority of the curricular topics reported were frequently secured a job and employee-employer relations.

5. Cooperative work experiences were most frequently provided by farm equipment dealers, feed and seed dealers, service station operators, and mobile dealers. Teachers in some schools indicated a shortage of small 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 individual assistance, the development of skills in reading and mathematics.

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

8. The second major objective of the study was to investigate the relationship between enrollment of academically handicapped students in agricultural work experience programs and their social behavior, (b) academic achievement, (c) recreational and extra-curricular aspirations, and (d) 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 indicated that the proportion of academically handicapped students who participated in one or more school activities decreased from 20 percent to 7 percent; the percentage of students participating in one or more community activities decreased from 31 percent to 18 percent.

IMPLICATIONS

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

1. The results of this study indicate that potential dropouts should have the opportunity to remain in school and become motivated to improve in academic performance.

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

3. 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 usually 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 pre-service preparation of vocational teachers.

4. 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 individuals are unable to tandem the academic and vocational programs conducted in the high school. To alleviate this problem, schools should include more classroom exercises to provide for work experiences and laboratory experiences designed to develop social, academic, and occupational competencies.

5. The academically handicapped students reduced their participation in the high school service organizations, the FFA, and other student organizations while enrolled in AWE programs. The involvement in AWE programs deprived academically handicapped students of opportunities for social development gained through participation in school activities and student organizations.

6. Here is a challenge to the AWE program directors to explore new approaches towards 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.

7. The decrease in days absent from school, and the increase in grade point average after enrollment in the AWE programs 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.

8. They allow for individual differences.

9. They are self-assessment techniques.

10. They are self-assessment techniques.

11. They are self-assessment techniques.
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 they 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 programs, 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 time they have had a chance to become involved with an ongoing club. The club should function any other school club — meeting on designated days, conducting business meetings, and engaging in school service projects, extracurricular activities, and recreational pursuits. In cooperative programs, students must regularly miss some school activities so such a club should be as well-rounded as possible in order to supplement the deficiencies in the students' academic lives.

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 and the dues, along with money earned from projects, can eventually accustom the students to earn money for their needs, practical skills teaching 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 finance fine schools, a club trip, an Employer's Dinner, gifts for employers, student clubs, or a school — all can make the year of work really worth the effort. Too, such efforts will gain the students 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 responsibilities should be elected to extend others of official responsibility as far as possible. Each student should be encouraged to participate. While working to keep the students involved in general school activities, the team spirit and individual club solidarity can be trained early so that the students will be dedicated to the club.

One particular club function, in school service project, cannot be overemphasized. This type of project, which may range from painting classrooms to providing seeding signs in a gymnasium, can be worthwhile in several areas: first, through providing services individual students can earn income and recognition from employers and administrators, with whom their previous contacts may have been negative. Second, school service projects can provide an excellent means of orientation for the club as a unit. Third, it is a desirable side product that can be utilized by the coordinator in terms of good public relations to insure continued effectiveness and success program.

A comprehensive, out-of-class class program 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 of job skills, programmed club activity can serve as an essential complement.

Training experiences provided by the instructional curriculum will be enhanced by the program of an affiliated club in which every student is involved.

The agricultural industry needs high-quality people — we cannot ignore this demand. Conversely, we must realize that there are many agricultural students who could be filled by students of the same normal ability. If agricultural education is designed to prepare students for employment, then we should train students for all types of jobs.

At Cerro it is difficult to educate socially retarded students into regular agriculture courses. The students are too old for them as they become frustrated and stopped attending the agriculture shop they lacked discipline and time to handle power tools safely, therefore they spent their time when other work or the shop free. Once increased their frustrations and lost students in classes so decided the time was due to do something for them.

When considering the job opportunities of the shop and the facilities available in the high school, we decided to work a class in Landscape Maintenance. The instructors' schedules were fall so we selected two advanced Ornamental Horticulture students who were willing to work with five educably 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 and 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 their work was of greater importance. It is in this area of attitude that we had hoped this team of boys would develop. In most classes 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 do, 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. The teacher in charge of Special Education said that the students' attitude toward school improved once they were working 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 more working outside they talked freely and answered questions readily, however, when the group moved indoors 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 group of students were retained 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 bountiful results often falls on the mentally retarded. 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 and discussed hows and whys of their maintenance work.

Finally, an important factor in the success of the program was the ability and understanding attitude of the students. The students established a rapport with their students which enabled them to accomplish the objectives with less difficulty. They spent more 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.
MEETING THE NEEDS OF THE DISADVANTAGED —

IS GROUPING THE ANSWER?

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 perennial problem frequently encountered is concerned with “grouping.”

What 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 measurable 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 advantaged might be disadvantaged if he were suddenly transplanted into a large city. The rural disadvan-
taged, 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. Someone 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 disadvan-
taged—substandard housing, lack of clothing, and an unbalanced and inadequate diet—are characteristics related to economic disadvantage. Efficient 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 improving conditions 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 20 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 ghettoes.

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 both the student 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 to participate in society. This tells the value of the system as related to needs.

The status of persons may be reflected in the value system they hold. In the so-called middle class, the value is placed on a particular set of values which is similar in both the different and dominant class. Most of these values may or may not exist. Persons engaged in agriculture work who have been left in the educational system are taught that the learning capacities of students vary. Teachers working only with the disadvantaged need to be aware of this moral. This is partially because the system is associated by other teachers with “low” or “disadvantaged.” The term “low” or “disadvantaged” was adopted in much of the literature and it was said that the disadvantaged students received more misunderstandings and misguidance than other students who had the or near the middle class. However, research studies point to the existence of certain qualities in the disadvantaged which other teachers believe do not exist.

There are many factors that 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-date has been considered taboo. Much teaching must be done to organize and administer instruction for the middle-class.

Grouping for Instructional Purposes

Grouping is accomplished by placing students in classes, sections, or subgroups, on the basis of a number of criteria, including interest, home environment, social status, and achievement. It is far more 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, need to be encouraged to join with a group. A certain amount of arbitrary reassignment by the teacher of the voluntary group 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. Those who are placed in these classes may be assigned as the provision of instruction in agricultural subjects. The best criterion for grouping is based on achievement and not ability in some other measure.

Grouping is used to cope with a wide range of variation in student ability. A group composed of different individuals will tend to learn at their own rate and from each other. New groupings may be formed at the end of a school year or when new students are to be studied.

Building a class into several groups is an essential step in the process of instruction. This method is used to plan instruction in such areas as English and mathematics in two ways: (1) they may be used in the main body student 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 up-

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The Agricultural Education Magazine
PROBLEMS, POTENTIAL, AND PROJECTIONS

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Educators use various criteria for describing disadvantaged persons. Perhaps the concepts of disadvantage and education 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 disadvantage 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 some general extremes often assumed to be the cause of disadvantage.

Problems

Legislation defines a disadvantaged person as one not succeeding in regular educational programs, but this is only a symptom of the real problem. Success involves the development of an operational definition of success as well as being an aptor approach to identifying the problem. Further classification into academically disadvantaged, culturally disadvantaged, socioeconomically 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 we are talking about. The general answer to such a perplexing, yet pertinent, question may be the 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 rate. 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 view 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 inferring potential and inheritance at birth. Several embarrassing questions can be asked of education which tend to agree with the genetic or natural un-
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 and handicapped. 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 1967-68 school year Pro-grams for the Mentally Retarded and Education offered in sixty-six local administrative agencies with sixty-two teachers participating in four hundred ninety-one positions. Projects for Handicapped Youth were developed in thirty-five local educational agencies involving sixty-two 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 areas for the disadvantaged and handicapped. A rating scale was developed to secure evidence of achievement in short-range and long-range goals. The instruments were designed to permit the Vocational Program to record separately for the program 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" in many areas.

3. Work experiences may be required in the field of "on-the-job training." Please note that the work experiences were placed on three factors:

a. the pupil's degree of readiness to be placed,
b. the availability of training opportunities, and
c. the pupil's eligibility to perform the job.

Teacher recommendations for improving the program were:

1. more professional education teachers working with handicapped and handicapped persons,
2. more equipment and supplies available for classes,
3. better procedures for identifying handicapped and handicapped persons,
4. more help from supportive services such as welfare, training aids, and cooperation with the Department of Vocational Education,
5. more help from state and federal agencies in special education, and
6. more help from state and federal agencies in special education.

Evaluation was revised and extended to include continuing program throughout the following school years.

Senior Programs for Handicapped

Approximately five hundred children attended day camps held at five locations across the state. Each day camp program was funded from a state allotment. As Vocational Education Amendments, the Elementary and Secondary Education Act, and State Department of Public Instruction were all fully commended; however, the total program was planned and initiated by the State Department of Public Instruction.

Children between the ages of seven years old and the state of the rural mountain areas of the Appalachian region area, centers designated for the mentally retarded. Students participated in various programs of recreational and educational development. They were involved in basic skills of arts and crafts. A group counseling program was vocational training with a curriculum focus on the development of social skills and personal adjustment. The counselor for arts and crafts taught individual counseling and group counseling in each of the three project areas. The counselor was given the job of bridging the gap between the several educational disciplines in which the student was enrolled.

Participants were encouraged to become involved in the camp 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, skills, and recreational activities.

Two teachers gained the experiences of thirty disadvantaged students in a summer training program offered in the School District of the State of the State of the State of the State of the State.

The experiences of thirty disadvantaged students in a summer training program offered in the School District of the State of the State of the State of the State of the State.

It is hoped that the use of the Handbook will lead educators to develop more flexible programs allowing all handicapped persons the opportunity to attend schools 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 very challenging; but, reaching and teaching the disadvantaged and/ or handicapped persons presents an even greater challenge to the dedicated educator.
MONTANA LOOKS AT THE EDUCATIONAL NEEDS OF HANDICAPPED AND DISADVANTAGED

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 agriculture education programs in Montana.

Teachers of vocational agricultural education, however, did not have time or resources to offer separate or special programs to students identified as needing special assistance. If programs were to be offered it was felt that it was essential to determine the degree to which students were successfully participating in present vocational programs in the cultural education programs. Vernon Laff, graduate assistant in Agricultural Education, initiated a study to:

1. quantify the numbers of handicapped and disadvantaged students enrolled in current agricultural programs in Montana;
2. determine to what degree handicapped or disadvantaged students are being served in programs of vocational agriculture in Montana;
3. determine if existing vocational agriculture programs can be designed and modified to accommodate handicapped and disadvantaged students.

Number and Characteristics

All sixty departments of vocational agriculture in Montana received a survey questionnaire. Of the 3,461 students enrolled in the 53 high schools reporting, 2,361 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 enrolled in the total school population. Four hundred and fifteen (415) of this total number of disadvantaged and handicapped students were enrolled in vocational agriculture. As a result, 415 students showed that 92 (22.2%) were handicapped, 173 (41.9%) disadvantaged, and 45 (11.0%) handicapped and disadvantaged. The sixteen year old age group was reported to have approximately 25 per cent of the students with both handicaps and disadvantages.

Program Changes

To determine if the existing vocational education programs in Montana could be modified to accommodate handicapped and disadvantaged students, several questions were asked by those who were not currently making any effort to provide special programs for the handicapped and disadvantaged.

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News and Views of NVATA

OUSTANDING MEMBER WILL GO TO EUROPE

Only Agricultural Chemicals has an- nounced that it will sponsor an Outstanding Member Award. All members of NVATA who have participated in the NVATA Outstanding Young Member Award Program. Each of the 6 Regional Winners will receive a trip to the Portland Convention with an expense paid trip. Certificates will be provided for State winners.

AIC AWARDS

The American Institute of Cooper- atives has announced that they will offer a $1,000 award for the best paper among the four top PFA Chapters in Cooperative Activities. The prize money will be awarded to the recipient of the American Institute of Cooperatives in Fort Collins, Colorado August 4-5, 1971. All entries must be received by January 19, 1971. The responsibility of the associate editor to provide eligibility to the outstanding young man member. The awards will be presented at the NAU Out- standing Young Member Award Program.

NVATA OUTSTANDING YOUNG MEMBER AWARD PROGRAM

United States Steel Corporation is again sponsoring the NVATA Outstanding Young Member Award Program. All members of NVATA who have participated in the NVATA Outstanding Young Member Award Program. Each of the 6 Regional Winners will receive a trip to the Portland Convention with an expense paid trip. Certificates will be provided for State winners. Each of the 6 Regional Winners will receive a trip to the Portland Convention with an expense paid trip. Certificates will be provided for State winners. Each of the 6 Regional Winners will receive a trip to the Portland Convention with an expense paid trip. Certificates will be provided for State winners.
FINDING TEACHERS OF AGRICULTURE FOR THE 70's

A new confidence in Agricultural Education was apparent at the National Convention of The American Vocational Association. New goals for programs in Agricultural Education for the 70's were discussed by the National Agricultural Teachers Association and by several 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 some instances 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 5% of agricultural teachers in the nation last year held temporary or emergency certificates. Studies on supply and demand for teachers of vocational agriculture have been made each year since 1965 as a guide to a national recruitment effort. During this period some trends in demand for teachers and in types of positions have become apparent. A common format has been followed in each study. Data are obtained from state supervisors in each state and teacher educators in 27 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, unified 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 62.6% 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 the 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 have increased. Since 1965, as shown by the accompanying table, the number of positions has ranged from 10,251 in 1965 to 10,500 in 1969. This does not include 782 positions in Technical Institutions and Community Colleges.

Although the number of positions in the nation has remained quite constant for the past several years there was a 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 others which had reductions in numbers of teaching positions. These reductions have been taken place in states which have been involved in recent school consolidation programs.

Last year the four states with the largest gains in numbers of teaching positions were Ohio with 39, Michigan with 42, Texas with 23, and Illinois 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 present 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 guide 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 efforts should be supplemented by other efforts to make use of qualified personnel.

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

1. The program of encouraging vocational agriculture teachers to recruit new students has been one way of making salaries of teachers competitive with other fields which they might enter.

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.

3. The supply and demand of teachers of agricultural teachers is influenced by current economic conditions such as rural school consolidation programs. While the results of this effort during the past six years has markedly increased the supply of teachers, 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.

4. The goal of providing 1,600 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 goal 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 will be necessary, however, by following the recommendations given above and preparing and qualifying about 1,000 teachers per year that the needs of Agricultural Education in the 70's may be met.
Stories in Pictures

ROBERT W. WALKER
University of Illinois

Students at Walkerville 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)

David Lee (right), student teacher, Pataskala, Ohio, conducts a judging exercise at a local fair prior to the selection of steers by two members of the class for their vocational agriculture program. (Photo by Bruce Baird, Vocational Agriculture teacher, Pataskala, Ohio)

Horticultural students experiment on Easter lilies using the chemical, phosphine, as a height retent agent. (Photo by G. G. Beam, Vocational Horticulture Instructor, Herndon, Virginia)

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 Schlieber, 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)

A South Dakota vocational agriculture teacher, Bob Johnson, left, learns the parts filing system at a machinery establishment as part of an internship workshop conducted by South Dakota State University. July 20-27, 1970. (Photo by H. W. Gaddis, Professor, Agricultural Education, South Dakota State University)