Stories in Pictures

ROBERT W. WALKER
University of Illinois

Vocational agriculture students at Mayville, Wisconsin, construct multi-purpose livestock feeders from used car tires. To build, remove one side of the tire by cutting all the way around about one inch from the belt, turn the tire inside-out and nail the resulting bowl-shapes through the other bend to a platform made of practice lumber. (Photo by John W. Santos, Vocational Agriculture Teacher, Mayville, Wisconsin)

Contractions in the small gasoline engine called 'bud' during PEA Week at The Pennsylvania State University attempt to correct facts placed in the engine by constructional mishandle. (Photo by Sidney W. Tallack, The Pennsylvania State University)

Students not enrolled in the horticulture class at Cherrystone, North Carolina High School use their study period to get experience in horticulture. They are supervised by William M. Edwards, Teacher of Agriculture. (Photo by W. T. Ellis, North Carolina A&T State University)

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Featuring — INNOVATION IN AGRICULTURAL EDUCATION
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Editorials

A Point-of-View About Vo-Ag's Survival

It is interesting to read and listen to the various reactions to the Vocational Education Amendments of 1968. On the one hand, there are those who hail the legislation as the best for a new approach to American public education. These enthusiasts see the Act as a means of enhancing the role of vocational education in the public schools. An interesting contrast is the reaction of some persons in vocational education and others who supposedly speak for vocational agriculture. Here are some examples of the rhetoric: "not since do this 1968 Act mean so much;" "we're fighting for vo-ag's survival;" "they've got to turn over everything;" "character education for the future is, among others, the activities...; of the Future Farmers of America." In the Vocational Education Act of 1965, vocational agriculture was redefined to include "education in any occupation involving knowledge and skills in agricultural subjects..." But the reactions of some to the 1965 Act imply that if vocational agriculture is to survive, it must be "protected" by specific mandate in federal legislation. Incidentally, none of the other occupational areas is specifically men-

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Guest Editorial...

Bold and Imaginative Innovations

The term "innovation" is no stranger to teachers of vocational education. Educational innovations have been accepted part of the vocational agriculture program since 1918. For example, some innovations which gained popularity through vocational agriculture are home visits with students and parents, individualized curriculum planning, leadership activities as an integral part of the course of study, work experiences which provide an opportunity for entrepreneurship, problem methods of teaching, performance objectives in lesson planning, and the development of long-range goals. These ideas have all moved from the innovative stage to accepted practice in vocational agriculture, but to some disciplines they still rank as innovations.

An innovation is a new idea, method or device. An innovation is the introduction of a new idea to your school, community, or classroom. You don't need to invent the idea, you merely introduce something new or make a change in your current operation. Accept the fact that an idea can be common practice in one community and still qualify as an innovation for you. An innovation, to be worthwhile, should be more than a novelty, a teaching trick or a gimmick.

Innovations come in many sizes and shapes. Little ideas are the easiest to establish and may be very effective in giving a new look to your program. Some of the little innovations include the use of single concept film loops, use of teaching machines and program materials, establishing an awards program for off-farm agricultural occupations, enrolling girls in agriculture courses, providing an adult program in the off-farm agricultural occupations, utilizing community resource personnel to assist in teaching, and using management games and other simulation techniques. These are excellent innovations, but we need bold and imaginative ideas that will keep agricultural education in the forefront as a relevant educational program.

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**Guest Editorial**

innovations in the future should encompass some of the following trends:

- A definite move toward the student as a self-directed learner. More emphasis upon self-improvement in the future will operate on an individual basis where the teacher's first responsibility will be that of understanding the student and diagnosing his educational needs.

- Vocational agriculture, as well as other vocational subjects, will be offered at the elementary school level. This will include an introduction to the work of agricultural occupations, and courses will be designed to provide orientation and exploratory experiences for elementary and junior high school pupils.

- New vocational agriculture programs will be designed to serve a wider range of students, especially those considered to be disadvantaged.

- Specialized courses in agriculture will be offered at the junior and senior level on a semester basis. Students could select from a dozen courses in agriculture which would offer a wide variety of occupational education and experiences.

- The high school will need to play a larger part in placement and follow-up of the graduates, not just for his first job, but for as many jobs as the graduate wishes to seek over the next 20 to 40 years.

There are only the beginning. There are literally dozens of new ideas being tried in communities around the nation. Your job as a vocational agriculture teacher is to visit other teachers, read the literature, find new ideas, sift the best, adapt the best to fit your situation, and begin work on your own "innovative program."

**Who Will Answer?**

**Charles J. Law, Jr.**

Director of Vocational Education
North Carolina Department of Public Instruction

Dr. Charles J. Law, Jr., is Director, Division of Vocational Education, North Carolina Department of Public Instruction, Raleigh.
Who Will Answer?

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Questions

The fact that questions are being raised about agricultural education across the nation has been alluded to in the first part of this article. There are four basic questions which are being asked. Not only are those questions being asked by others, but agricultural education teachers must ask these questions of themselves. I would like to speak briefly to each of these questions without pointing out some of the specifics of what is being asked at the present time.

Where do we go from here? What does the future hold for agricultural education? Should we be timid and hold back? Should we believe those prophets of doom who predict that all forms of agricultural education are at an end? Or, should we go as we know we must and answer the problems which face agricultural education in America today?

Who Will Answer?

Again, the refrain from the song comes to mind, Who will answer for agricultural education teachers? Who will answer for the thousands of agricultural education students, both youth and adults, in this time of trying circumstances? There are four possibilities. I would like to explain each briefly.

The traditionalist. Will the traditional agricultural education teacher, who has always done things in much the same way simply because they have always been done that way, be able to answer the new questions that are sure to fall back on the same stock answers of an earlier decade?

The reactionary. Will the answers given by the group of agricultural education teachers who are reacting to what is going on be given in a very negative way? Will this group of teachers go on saying we must have the same things we have always had simply because we have always had them? Will they be able to answer the questions in a legitimate fashion, or will their answers be so biased and so narrow as to be of little worth to anyone?

A new breed of teachers. Will the answers be given by a new breed of agricultural education teacher who is young, inexperienced, innovative, and creative, and who is now placing the need for a teacher should be asked? I think not. I think in the last analysis the answers must come from the following group of teachers.

The solid agriculture teacher. This is the teacher who has been innovative, flexible, adaptable, and creative. He has been willing to stick his neck out for his beliefs, and he has been willing to go the extra mile, day and night, to do the job that must be done. He has been willing to look at his curriculum, to be flexible, and he has been willing to adapt instruction to today and tomorrow and not to yesterday. He has been willing to be creative and to dream of new ways of doing things.

If the answers are to be found for agricultural education, the answers are going to be given by the same solid agricultural education teachers who are working so hard to make education work. They are the only teachers who have taken young men into full positions of leadership, the agriculture teacher and say, "What I am offering today in time with the needs of today and tomorrow?" He has been willing to be flexible and he has been willing to adapt instruction to today and tomorrow and not to yesterday.

Harold W. Sullivan
West Virginia Department of Education

A New Venture in Public Information

When vocational agriculture is mentioned outside the field, opinion is often voiced that vocational agriculture is declining, perhaps non-existent. Too many times this conclusion is a result of a lack of knowledge about what constitutes a course of instruction in vocational agriculture and the benefits of such a program.

To high school students of suitable employment rank high in personal objectives. An occasional session with the high school guidance council often fails to supply enough data to offer a student all he needs to select a satisfactory career. Guidance counselors are not aware of the vast number of careers for which a background of agricultural experience is desirable.

News Column

It became apparent to the state supervisory staff in West Virginia that regular, factual, and timely publication of information concerning agricultural education in agriculture was needed. A news column designed for release in weekly newspapers appeared to be one of the better techniques. A weekly column, "Opinions in Agriculture" was begun in 1938.

A personal letter to sixty editors of weekly newspapers requesting their cooperation was prepared and mailed with the first mimeographed column. Many replied, assuring their support; others did not reply but used the column.

Colleges and federal governmental agencies, such as the West Virginia Department of Natural Resources and the U.S. Soil Conservation Service, were particularly receptive to the idea of publishing information concerning opportunities in their fields. Many were contacted later called with suggestions for other articles or asked that information on a certain job be repeated the next year.

Some personnel directors planned paper clipping service to respond to the column. One department stated that for years they had been forced to "beat the bushes" to fill a 75-man summer work crew in the past year. Because these cooperating agencies were not aware of the vast number of careers for which a background of agricultural experience is desirable.

Preparing Articles

In order to secure information for articles, letters were written to approximately 300 sources of occupational guidance, including private companies, educational institutions, and agricultural organizations. Surveys were conducted, particularly of companies dealing with forest products, to learn labor needs. Agricultural association meetings were attended to interview teachers concerning desirable education and experience necessary for employment in their fields. Professional guidance materials were purchased and a file of agricultural careers material.

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DEC. 31, 1960
Strategies for Teaching Students with Special Needs

J. A. BARGE
Florida Department of Education

We are in the midst of basic social changes that increasingly affect all aspects of the educational system. We find a substantial group of students who are not adequately served and do not make normal progress in school. Primarily, these are students whose early experiences in the home, school, and community, whose motivation for learning, and whose goals for the future handicap them in both school and work. They are often defined as disadvantaged and potential dropouts.

Research indicates that the root of their problems may lie in large part to be found in the school itself. Many school conditions which we do not transmit the cultural patrimony or the art of learning that is characteristic of the regular school setting. The task of the school is to create conditions under which students are helped to overcome these handicapping conditions and become contributing members of society. It is in the context that special needs programs in agricultural education are planned and implemented.

Organization

In Florida, attempts have been made to develop programs in agricultural education for the disadvantaged around horticulture and farm mechanics. Curriculum modifications are made to provide training for entry level skills in several horticulture occupations such as garden center worker, landscape worker, greenhouse worker, landscape gardener, and groundskeeper.

The programs provide instruction in blocks of time from two to three hours daily. Class loads are limited to a maximum of fifteen, with ten or twelve being the optimum. Flexibility is built into the program to provide for individualized instruction, independent study, project activity, and job placement. Adaptations are made to meet the individual needs of students. The program is designed to keep the student in school, thereby serving as a vehicle for motivation and job preparation. Emphasis is on teaching the student rather than content.

Curriculum

The very nature of the experiences in school must be changed for the disadvantaged. In no way should intellectual problems be minimized. Disadvantaged pupils must have experiences which will bring understanding of the humanities and science, but the approach for bringing about these understandings must be different from the traditional approaches. Problems of living in the home, in the school, and in the community must be part of the curriculum. Field trips, movies, camping, parties, operating machines, creating models, first-hand experiences with life problems, role playing, and individualized program instruction are recognized as effective approaches conducive to working successfully with the disadvantaged.

The aim of life itself must determine the curriculum of the school. Disadvantaged students must be involved in or be given the opportunity to be involved in the total learning experience. They must help decide the goals and purposes of all activities, and they must help select experiences which seem to give promise to reaching these objectives. Students must understand the type of performance required to satisfy each objective and be aware of the level at which performance must be demonstrated to conclude that the experience was successful. The director of the learning experience must be skilled at communicating these desirable changes in the student's behavior prior to involving the student in the activity.

Every part of the school environment is a vital aspect of the overall development of students. The teacher needs to recognize that he is responsible for giving guidance and seeing that effective communication skills are developed, that human relations skills are developed, that realistic values are established, that new interests are created, that job entry skills are mastered, and that process of thinking and problem solving are learned.

Techniques and Materials

It is assumed that individual students can learn through verbal means alone. However, the use of nonverbal cues is essential in getting the point across in learning for disadvantaged students. Using nonverbal materials such as films, filmstrips, pictures, slides, and tapes permit immediate success in the acquisition of knowledge for the disadvantaged. This enables the student to associate the verbal with the nonverbal, thus strengthening the student's process of learning.

To teach the concept of planting distances is disadvantaged and handicapped students enrolled in agriculture as the Vocational Technical Center, a large model of a ruler with lines painted on its edge was constructed. Under this model, the teacher was able to point out proper planting distances for various plants and at the same time provide students with practical experiences in using numbers. This technique also helps students grasp an understanding of measurements and difficulties inherent with the machines, concepts of space, and distance, and volume development understanding and reinforce the students' self-confidence through successful participation in the activities.

At the Monmouth Vocational Technical Center, procedures for teaching the operation of machines and equipment in the Vocational Technical Center developed individualized, self-paced, and self-study laboratory projects such as golf greens, lawn turf, vegetable gardens, landscape designs, and turf care. These activities are used for demonstration purposes and for providing practical experience in the field activities. The supervisor of these activities is a very important factor in the success of the project.

Each part of the package contained the content and related practical experiences to guide students through a series of experiences in acquiring skills in horticulture and farm mechanics. The package also contained sections on evaluating, English, and mathematics which the student must complete in order to progress to the next level of the program. Students are assigned to specialists in these areas to provide individualized instruction.

Teaching techniques and materials have to be geared to the needs of the students and in many instances are not applicable to the students from the rural backgrounds from which many of these students originate. The most attractive and varied materials that may be acquired to continue and entice the student to learn are required.

Continuous Project

A definite line of demarcation between the beginning and ending of the project is required to prepare the articles and answer correspondence is not severe. Much of the work is handled by a secretary, but approximately two hours per week are required to prepare the column and secure the necessary data. More time is needed, of course, for reading and writing the columns.

A New Venture in Public Information

Guidance counselors, vocational agriculture teachers, and agricultural education personnel in the state receive copies of the monthly newsletter. Potential employees are sent a copy of any article applicable to their field of employment.

Continuing Project

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Sustaining Commitment to Innovation

WILLIAM L. HULL
The Ohio State University

As agricultural educators, we perceive ourselves as open and receptive to new ideas. Like apple jack and motherhood, the concept of innovation as a road to improved practice is readily accepted in principle by almost everyone. Yet in practice, we resist the new and return to familiar techniques. This article addresses itself to conditions for planned change and ways of encouraging program innovation; this topic should be of vital concern to state supervisors and teacher educators.

Systematic Approach

The Vocational Education Act of 1963 and the Vocational Education Amendments of 1968 have brought pressure to bear on the need for innovation and change in state and local programs of vocational agriculture. For the first time in the history of vocational education, resources are available to implement a system of planned change for program renewal. State boards of vocational education are expected to invest in research and development activities to increase vocational education's utility to society. Provisions of these Acts include opportunities for pilot testing innovative programs, a mandatory professional education and employment status to other school districts. How state boards elect to use discretionary funds will determine the impact of these activities on vocational agriculture.

It may be tempting for administrators to launch new innovations without an disciplined approach to funding innovative programs. Such an approach could result in small amounts of money with short time allocations being sprinkled throughout a state. Such a strategy has the chance of harmful impact on existing vocational education programs.

Heinrich's study of Title III programs of the Elementary and Secondary Education Act showed successful projects to have a larger budget, less per child, and extend over a longer period of time than unsuccessful innovative projects. Efficient use of research and development money is critical to program renewal and curriculum reorganization. It is an unusual individual who can transcend the immediate in favor of the future. It sometimes requires personal risk of reputation to attempt implementation of idealistic, professional goals.

A second factor conducive to sustained commitment to innovation is a substantial atmosphere for change. Channels of communication within an organization need to be open with frequent opportunities for face-to-face contact. Havelock's identifies the following characteristics of an ideal change relationship: reciprocity, openness, realistic expectations, expectations of reward, structure, equal power, minimum threat, recognition of differences, and involvement of all relevant parties. These characteristics describe the organizational climate of mutual cooperation.

Finally, sufficient resources must be available to support innovation in a programmatic manner. Staff time and program funds invested in research and development can be expected to pay dividends in the long run. Not every innovative idea will result in macrolevel gains in agricultural education. But the opportunity for improvement provides a viable alternative to unflinching, right-headed, deaf and dumb resistance to the change program. The maintenance of existing programs and the development of techniques for installing programs of uncertain outcomes as priority concerns for most state directors and head teachers educators.

The concentration of dedicated staff, the creation of a supportive climate for innovation, and the allocation of research and development funds are necessary but not sufficient conditions for sustained commitment to innovation. There must be action which is deliberate and calculated to improve the existing situation.

Now is a time to expect a dramatic change in providing financial assistance to high school vocational agriculture programs. Funds were used as an incentive for innovative proposals with emphasis placed on programs to serve additional students in more effective ways during the summer. A direct relationship was noted between program costs and services provided. Money represents only one aspect of any change. Supervisors may want to consider released time for high school vocational education staff for expanded vocational agriculture programs, and other methods for rewarding teacher achievement.

Sustained Program Renewal

Activities which aim toward program renewal must be at least in the goals of the organization. Activities should be initiated within existing channels of communication if at all possible. A responsive system yields pressures in a systematic manner and avoids erratic change due to revolutionary forces. The following guidelines suggest ways to encourage program innovation.

1. Emphasize the importance of people's enjoyment and satisfaction with the outcome of the innovation. The emphasis on program innovation should bring together all elements of the community — teacher educators, supervisors and parents teaching and learning to function as a system of vocational agriculture.

Success

Success of innovative programs in any exemplary effort frequently depends on the support of others in the profession. Influential state leaders may cast doubts or praise innovative programs based on evidence of their work can be obtained. This creates expectations which may be unreal and develop hardships for the program staff. Any new or emerging activity requires promotion and in deciding whether or not it will be adopted. Most people prefer to form judgments based on empirical evidence. Select an innovation which can be adjusted and changed to fit the local situation. People affected by the new idea should be involved in assessing its merits. Changes to accommodate provincial ideas and customs are desirable as long as they do not interfere with the central thrust of the innovation.

Obtain tentative approval of the innovation before initiating the process of installation into the school system. A review of the merits of the idea should determine its appropriateness for the system. Agreement on cost-sharing arrangements with a scheduled withdrawal of "outside" funds increases the likelihood of successful adoption.

Rapid growth in vocational education research capability and information facilities has occurred in the last decade. This technological development has encouraged sustained innovation diffusion in a comprehensive scale. Research coordinating units have provided personnel and procedures to stimulate research activity, assess its contributions, and implement research findings in local programs of vocational education.

The Education and Research Information Center (ERIC) is a database based information system that has provided a valuable capability — a document filing system — to the process of innovation and planned change. State divisions of vocational education have undergone a metamorphosis from a regulating agency to one of coordination and planning program renewal. This emphasis on program improvement should bring together all elements of the community — teacher educators, supervisors and parents teaching and learning to function as a system of vocational agriculture.
A New Ball Game

ELVIN DOWNIS, Supervisor
Utah State Board of Education

Yes, we are in a new ball game. Things have changed since the Vocational Education Act of 1963 and more particularly since the Amendment of 1966. The product of vocational education is a well trained individual who is placed in the field for which he is prepared. Our objectives are now and should be, select the student for vocational agriculture, train the student, and place the student. This new approach in vocational agriculture suggests that we give more specificions and directness to teaching.

New Philosophy

The new philosophy of the approach to teaching in terms of measurable objectives must be reflected in the objectives set by vocational agriculture teachers. The objectives might read like this:

- All students enrolled in vocational agriculture will have realistic occupational goals within the board field of agriculture which are recorded in the teacher's and counselor's file.
- All students enrolled in vocational agriculture will be given the opportunity for productive supervised work experience and the teacher will report on these activities at the end of the year.
- The teacher will make arrangements for at least six well planned field trips to farms and agricultural industry for each class.
- The teacher will require each student to keep an up-to-date journal including instructional notes and miscellaneous information on the student's occupational objective.
- The teacher will require each student to keep an up-to-date record book of activities, earnings, and other experiences in relation to his supervised occupational experience.

The teacher will provide leadership in enrolling new and up-to-date periodicals, books, and bulletins for the department's library.

Weekly lesson plans will be prepared and copies delivered to the principal's office not later than Monday morning of the week.

The teacher will arrange for resource persons to visit each class five or more times during the year to discuss employment opportunities in agriculture.

The teacher will encourage each student to become a member of the FFA and participate in leadership and performance activities.

The teacher will arrange for appropriate awards to be presented to outstanding students with emphasis on freshmen and graduating seniors.

The teacher will arrange for educational tours for students during the summer months with emphasis on both farming and off-farm agricultural occupancies.

The teacher will make special arrangements to meet the needs of handicapped students and other students with special needs.

Behavioral objectives of students must be specific, well defined, and measurable. We are departing from a generalized course in agriculture. This is 1970 and with it has come some definite standards for meeting occupational needs. Vocational teaching can no longer be general. It demands that we select the student, train the student and place the student.

Some Observations

I would like to mention briefly a few observations that have come to my attention.

A shift from production agriculture. I am not sure how much progress that has been made in shifting from conventional VW-Ag 1, 2, 3, and 4 specific titles for courses in the total field of agriculture. In one high school I visited recently, I was given an outline of the proposed courses which included fifteen specific courses in vocational agriculture. Some were designed for a semester, others for one period throughout the year, while others were planned for two periods per day for the full year.

Record keeping. In general I think we have slipped backwards with respect to record keeping. Perhaps it is more difficult to teach record keeping with more and more boys from other than farm homes. Record keeping can be excellent training whether a boy is to operate a farm, work in a green house, or participate in a cattle section. Record keeping is a practice that will be used throughout life by most young men. I feel that it is our responsibility to prepare students with basic understandings in keeping acceptable records.

Disadvantaged and handicapped students are often asked frequently what we are doing in agriculture to take care of these students who are disadvantaged or handicapped. The answer is the answer we get in agriculture.

The big question facing vocational agriculture in the 1970's is not whether we continue to exist but rather in what capacity. We are well aware of the reorganization not made by the press and certain segments of the business community that "agriculture is on its way out." If we accept this statement literally, we will be compelled to expect that future generation can and will exist without the benefit of food, shelter, and clothing.

We in vocational agriculture should accept this as a challenge. Our job today is more important than ever before. If we are to remain a potent influence in keeping America strong and free.

Change

Let us be the first to admit that in order for vocational agriculture to remain a potent part of the educational and agricultural complex, we must make certain adjustments and changes.

Extra money is available and we can no longer say that we could do it if we just had the funds.

Is summer work production? Some superintendents are firm in their position that the summer period for agricultural teacher is less demanding and it is worth less per hour or per day than work during the school year. I take exception to this. Summer work can be the most productive of all in a good vocational agriculture program. What constitutes a productive summer? I suggest the following:

- Every student is assigned to a challenging occupational work experience program with a written plan as to his goals.
- The teacher conducts leadership activities with both FFA members and young farmers.
- The teacher conducts short courses in agriculture for whatever need might exist.
- The teacher sponsors field trips, maintains laboratory clinics, and demonstrates to his class.
- The teacher orders new equipment, supplies, and teaching materials.
- The teacher is one of the best motivators for per sonal achievement. It becomes an excellent criterion for evaluation. The keeping of a good journal is a developing a habit that will contribute much to the student as he pursues any type of advanced training.

Challenge and Change in the 70's

L. L. SELLERS, Superintendent
Alabama Department of Education

The big question facing vocational agriculture in the 1970's is not whether we continue to exist but rather in what capacity. We realize that 90 percent of the labor force in this country is either in production farming or some equally important agricultural related jobs, should it not give us the incentive needed to adjust instructional programs to meet the needs of all.

We are all taught in the same predicament. Many teachers have not been adequately prepared to give the needed instruction in the many new and related agricultural employment areas that have grown up in the great agribusiness complex during the past few years. It finds us in the same position as a football team that is woefully short on score and experience but unusually long on talent and desire. At present, we are playing a catch-up game.

We need some adjustments in teacher education programs on both the graduate and undergraduate levels. It is awful hard to push something that is already there and is out in the world. However, during the past few years we have been gaining ground. Many states have been conducting intensive workshops for short periods in areas where the greatest needs exist: small engines, ornamental horticulture, welding, electricity, masonry, plumbing, pulpwood production, beef, and hogs. In addition, some teachers have attended regular summer school sessions where they gained additional knowledge in many phases of technical agriculture.

Style

I do not believe that vocational agriculture is going out of style, but the style may be changing somewhat. I am not pessimistic about the importance of or the role vocational agriculture will play in the future development of our nation. We have graduated from the horse and buggy days. We may not yet be in the Cadillac and Rolls Royce society, but neither are we living in the Model T Ford era. The future may not at times look rosy, but I am confident that we have an important part to play in the present and the future of agriculture. This is the challenging future of which we are an important and dynamic part.
Leadership Styles in Agricultural Education

CAYCE SCARBOROUGH
North Carolina State University, Raleigh

Leaders of any group at any time will vary. However, for a given period time leaders within a group can usually be clustered around certain types with fairly well-defined characteristics. The phenomena has been studied by people interested in leadership and leadership development. Apparently the leadership group (or even we as a society) develop a sort of readiness for a certain type of leader for a period of time, then another type at another time. The followers have a large hand in making the leader but even this hand varies because we flickle followers sometimes change our minds quicker than the leader can change his style, even he is capable of making major changes in his leadership. Ministers sometime have a difficult time on the kind of leader the flock wants.

Leadership Styles for the Future

Looking at the future in a predictive fashion is fraught with risks. One of these is that we are never sure who our followers will be asking, I expect that people will be adding some questions that we had just as near we would not ask. One of these is already being asked in our state: How many months will the two-year degree in agricultural education be employed this year? This question had never been asked, at least officially, in the state. It may be a good question, but it sure opens up a whole new can of worms, Pandora's Box, or however you want to say it for a "mess of trouble."

Leadership styles that were acceptable in the past will not be adequate nor acceptable in the future. With the emphasis on people instead of programs, it is going to take different leadership styles to "recruit and sell" agricultural education's place in occupational orientation as well as vocational and leisure programs.

Who Will Be The Leaders of the Future?

The answer to this question may be as obvious as the slogan that I saw the other day on the side of one of those small streams along the highway for school children when they visit the farm. The slogan said, "Our Children's Future Will Be the Leaders of Tomorrow." As I drove on down the road, I decided that this was indeed a true statement. We cannot have this, for better or for worse. So it is with educational agriculture, the younger fellow will replace some of us who will be retiring, ready or not. But in the meantime, we must be able to see some patterns that will indicate the type of persons who will become leaders.

The educational agriculture leader of the future must be concerned about CAREER DEVELOPMENT and how programs in vocational agriculture can contribute to the career development of the individuals enrolled. This means that the leader will lead the major factors involved in relating education to the world of work. Some of these factors are motivation and work, vocational development and maturity, occupational sociology, vocational guidance, vocational behavior, and career pattern development. Bob Warmbroth's editorial in the March, 1970, Agricultural Education Magazine offers some very interesting concepts for the "new" vocational education that is emerging.

The agricultural education leader of the future must be "socio-econ" minded too. It may be more important for him to know the trends in population mobility in an area than to know the latest trends in growing crops. What careers are open to whom and where? Where do people go to work everyday? The agricultural education leader of the future will be creative and inventive in contrast to the authoritarian defender of the status quo. We must clarify the responsibility of our students and LEADERSHIP. Because one is a State Supervisor or a State Director or a Dean or Department Head does not necessarily make him a leader.

Clarifier of Issues

The leader of the future will need to be a clarifier of issues that affect agricultural education. Many of these will be forces coming from outside agricultural education and usually beyond the control of agricultural education personnel. One of these areas is that of objectives or goals of people in programs of vocational agriculture. In this area it appears sometimes as if we fit the statement of that famous philosopher. Pogo when he said, "We have met the enemy and he is us." We seem to be hell-bent on trying ourselves down to goals that are unrealistic in terms of people that we enroll. Then we are in trouble.

Even in the FFA we try to make it work and do it what cannot possibly do, given the people who are in FFA. "Future Farmers, Why are we here?" The FFA is and will continue to be clear. "To practice brotherhood, honest rural opportunities and responsibilities, and the development of leaders which a Future Farmer should possess." That is broad and challenging. To do this it is necessary that the Future Farmer mean Farmer of the Future, literally. This was done as late as 1954 in a national magazine, USQ's American Education. To further illustrate the point, a guidance publication was done entitled "Agriculture in a Partitioned World" and sent it to all guidance counselors in the country with a file number all ready for the guidance counselors to use. It was to be filed under FARMER, General, Yes, we complain that guidance counselors do not understand that "agriculture is more than farming."

The agricultural education leader of the future must be... concerned about career development... and how programs in vocational agriculture can contribute to career development... socio-econ minded... creative and inventive in contrast to the authoritarian defender of the status quo... a clarifier of issues that affect agricultural education.

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DEC. 1970

Another illustration is the nationally distributed bulletin on objectives which was developed by an able committee of leaders in agricultural education. In 1969, again, we called a good game of broader programs but when we got down to specifying objectives, we ran them down real good! We continued to use the term "individuals engaged in or preparing to engage in agricultural occupations." Then we eliminated all of those occupations requiring a bachelor, master, or doctoral degrees.

As Howard Martin pointed out so well in his AATEA Lecture at AYA in December 1969, we should move to goals that are beyond "develop agricultural competencies needed by individuals engaging in or preparing to engage in an agricultural occupation." Higher goals are needed for many reasons, among those being appeal to those under 30 which is a pretty important point. Howard's broadly designated goals are as follows: Agricultural Production and Marketing, Natural Resource Management, Environmental Development, and Agricultural Research and Service.

An earlier version of a similar grouping of areas for goals was suggested by Byrum's Agricultural Production, Agricultural Business, and Agricultural Professions. This general idea was followed by leaders in Georgia, Louisiana, and possibly other states. But if all students must be trained as part of an agricultural occupation in one of eight categories, this makes it difficult for all concerned.

Some Concluding Remarks

What I have been arguing for is a leader and a program at AYA in agricultural education offering the person enrolled the best possible opportunity to develop himself or herself toward a desired and appropriate career. If we must limit this to an agricultural career, let's include in agricultural professions as well as production and business. This is not a new idea, certainly it has been around since the first first-year of agriculture helped the first student see a wider world for himself, frequently including a degree at the College of Agriculture. Every teacher since who is worth his salt has tried to help his students find a meaning in part of what they can do in the world of work.

In fact, in my opinion, this might well be the greatest single contribution that teachers of agriculture have made through the years. This would be difficult, to say the data, and to reach a valid conclusion, I will let you stand as an opinion subject to such objective data as myself, yes, and thousands of others who had the privilege of learning to do by working under an able teacher of vocational agriculture.

So, I suppose that what I am saying might be a coincidence. But what our best teachers have been doing through the years. We thought that the Vocational Acts of 1963 and 1965 were legalizing this highly personal and personal approach to a broader occupational program, but we keep hammering ourselves in official documents and in other pronouncements. I still believe that the mandate of the 1965 and 1966 Acts is for the best possible occupational education for those who need it, and that is just about "everybody in every state in the country." If our programs do indeed help those enrolled find their places in the world of work as professionals, I believe that will be the ultimate test.

National Action

I believe that we should consider paring off our professional leader in agricultural education in Washington, attached to the AYA offices, with an advisory help and expense account to do the professional job that we need. If we do, we can employ our executive secretary, it would seem that all in agricultural education could employ one at the national level. While this is being considered, let's join hands behind Howard Martin's suggestion that we establish a Commission to Study Gear for Agricultural Education.

Modern Pioneers Needed

It is my considered opinion that we need pioneers in educational agriculture education. In the 70's just as we needed them 50 years ago. No, the leadership of the 20's will not do now; they will lead the leadership of the 60's. You cannot be the leader of the present leaders; if you try, you will be forever trying to catch up. You must be a new member of a preferably a 1971 or 1975, modern leader.

This article is adapted from Dr. Scarbrough's Graduate School Lecture in Agricultural Education which he delivered at The Ohio State University, February 1970. In this picture, Dr. Scarbrough discusses some of the topics he covered. (Photo by Ralph J. Woodin)
Innovation in Adult Farmer Education

ROB JASKA
Texas A&M University

It is recognized and accepted that systematic adult and young farmer education is an integral part of vocational agriculture. Public schools offering vocational agriculture have the responsibility for providing systematic instruction for adults established in farming and ranching or in the process of becoming established. Adults participating in farming and ranching on a part-time basis also need assistance in becoming more proficient.

Specialists Assistance

To assist the public schools to fulfill this responsibility and to enhance and enrich the adult farmer education program in local schools, the Texas Agricultural Extension Service, taught by these specialists are conducted according to the standards set forth by the Texas Education Agency under the State Plan for Vocational Education.

These standards specify that educational programs may be conducted by specialists on a short course or workshop basis for regular school sessions or by farmer groups which meet at scheduled intervals throughout the year. The length of short courses is a minimum of twelve hours of formal instruction plus laboratory work. Specialists are employed in the various agricultural subject matter areas according to needs determined mutually by the Texas Education Agency and Texas Agricultural Extension Service.

A Coordinator is employed to administer the program under the supervision of the Head of the Department of Agricultural Education at Texas A&M University. The appropriate subject matter department heads in the College of Agriculture assume responsibility for the accuracy of subject matter presented by the specialists.

Program Operation

Generally, each specialist is assigned to one of the ten geographical areas for vocational agriculture in Texas for a period of one month each year, September through June. Assignments to local schools within the area are the responsibility of the area supervisor. Each specialist conducts an equivalent of three or more one-hour courses during the month. The specialist devotes the remaining part of the month in preparation of teaching materials and obtaining research data.

To obtain the services of a specialist, the local teacher of vocational agriculture makes a request to the area supervisor of vocational agriculture. The area supervisor makes assignments for the month the specialist is scheduled in the area. The area supervisor forwards assignments directly to the State Supervisor of the Specialist Program who sends application blanks to the vocational agriculture departments related along with a course outline, biography of the specialist, publicity releases, and other information pertaining to the short course. Specialists are available in the subject matter areas of animal science, crop production, forestry, horticulture, poultry, and education.

Funds

The Texas Education Agency reimburses Texas A&M University for the salaries and travel of the Coordinator and specialists and for the salaries of two secretaries. Texas A&M University provides office space and facilities for the staff and secretaries.

Office supplies, demonstration equipment, other materials, and other items the specialists in conducting short courses are funded through local accounts which derive in funds from fees collected from short course enrollees. The first charge to short course enrollees ranges from $2.00 to $10.00 depending upon the course.

Scope of Activities

The program has grown from one specialist when the program was initiated in the spring of 1959 to a staff of ten specialists during 1967-68. From June 1958 through June 1969, a total of 2,917 adult and young farmer short courses were conducted with a total of 58,585 persons participating. An average of 426 vocational agriculture teachers participated in these short courses each year.

During 1967-68, the specialists conducted 266 regular one-week short courses throughout the state with 6,050 participants, an average of slightly over 23 enrollees per course. While conducting these short courses, extra and individual instruction was given to 4,762 people in the field. In addition, 26 workshops for teachers of vocational agriculture were conducted during the year giving professional teachers participating.

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AN INNOVATIVE PROGRAM

IN ORNAMENTAL HORTICULTURE

RUSSELL BRUMBY, Teacher of Horticulture
Niagara Falls, New York

In February 1966, the horticulture program was born in Niagara Falls, New York. The project was financed by Title I of the Elementary and Secondary Education Act. With the support of some $200,000 in federal funds to build a 25' by 100' greenhouse and a 25' by 25' classroom laboratory building, the project was completed. The 3 golf holes of a temporary four-hole golf course completed to teach golf course management. We have experimented turf with grasses all the world and have cooperated with the cooperative of a seed company.

In March 1969, we added two 25' by 100' greenhouses to increase flower production. Each year the students grow some 50,000 annuals which are used to plant eleven schools in the city school system. The excess plants are sold to faculty and staff within the school system.

A night course, held twice a year for adults, covers subjects such as general horticulture, planning, physical and topiary structures, and the necessary steps to become a professional horticulturist.

Students

At present we have 66 students. Each student spends a double period in horticulture during each day for two years. The course is open to students in grades nine through twelve in parishial and public school poverty areas. It is also available to dropouts and mentally and physically handicapped persons capable of learning.

Facilities and Projects

Since moving into the completed building in February 1967, we have grown considerably. The students have completed a 125' rose bed garden, six large annual flower beds, and completely landscaped the greenhouse and classrooms building. Also, one 15-hole putting green, a 30' golf course, a 25' by 25' classroom laboratory building— with purchase tools, a tractor, and other assorted equipment—and to prove the salaries for staff to start the program. The complex is situated on a 14-acre site adjacent to LaSalle Senior High School in Niagara Falls.
Change Agents for Agricultural Education

We are living in an age of change. The indications are that this evolution will continue but at an ever increasing pace. Evidence verifies the fact that change, have been modified and it may be slowed, but in the long run it seems inevitable.

Teacher educators and supervisors are in a position of responsibility and opportunity when it comes to fostering change and to directing the reconstruction of modifications currently in process. As such, they have not only a privilege but a mandate to fulfill the role of change agents for agricultural education.

* The Big Picture

As change agents, we should face this responsibility with optimism and enthusiasm. We must gear our efforts to meet the needs of the public. In doing this, practical and needed suggestions must be modified to the level of what the public will accept.

In the primary function of the agricultural educator is developmental. Its purpose is that of aiding individuals to become what they are capable of becoming. Instruction should be presented in such a way that it is not only felt and experienced but that the learner will respond to it. In other language, words and philosophy should put on their working clothes.

The agricultural educator should realize that bringing about modifications requires the efforts of a large number of persons and that one individual seldom has the intellect, insight, personality, or energy to be all things for all people in all situations. Except in situations of emergency and stress, change is normally slow and accompanied by a certain amount of resistance. It may also be “messy” and cause temporary inconvenience.

* Opposition to Change

It will not be at all unusual for some people to be opposed to change. The unknown and the uncertain usually always bring about a feeling of uneasiness. The usual, the mundane, and the accustomed way of doing things become comfortable, whereas instabilty and the new or untried bring about a feeling of uneasiness.

Those who are antagonistic toward change may exhibit resistance openly or covertly. The hostile person may manifest his feelings in a variety of ways. He may refuse to cooperate, he may openly criticize the change or the person suggesting it, he may passively ignore his holding views not to his liking, he may attack the person or activity abnormally by finding fault with the educator or the program generally but never openly by attacking the person—the changes which are being sought.

This hostility leads to a lack of trust between the persons... the more people are not felt and experienced but that the learner will respond to it. In other language, words and philosophy should put on their working clothes.

The agricultural educator should realize that bringing about modifications requires the efforts of a large number of persons and that one individual seldom has the intellect, insight, personality, or energy to be all things for all people in all situations. Except in situations of emergency and stress, change is normally slow and accompanied by a certain amount of resistance. It may also be “messy” and cause temporary inconvenience.

* Bringing About Change

When fostering change, we should be aware of the ways groups arrive at goals and purposes and ways in which the educator can assist them in achieving these ends. Positive steps are needed in order to have any impact on the group. There is an additional step which is necessary. It may be that you have to make use of the following suggestions.

Innovative Professional Organizations

Keep Up With the Times

We speak of a changing agriculture, and we have seen the need for innovations in supervised experience programs, curriculum, and the FFA. Professional organizations must also change if they are to reach their objectives and meet the changing position. Facing new problems and seeking to further their objectives, the Illinois Association of Vocational Agriculture Teachers proceeded on a course during 1969-70 which was not only a change in itself but will bring about further change.

* The Setting

The Illinois Association of Vocational Agriculture Teachers’ Convention in June 1969 seemed to “drive home” several points.

—Teachers faced the prospect of working under a new state plan for vocational education which was an unknown factor in a state which is rather highly urbanized.

—Juniors were growing in number with twenty-two ... courses of study. One should not... put undue limits on its efforts to upgrade agricultural education, particularly if there is a need to be used realistically.

—Bringing About Change

When fostering change, we should be aware of the ways groups arrive at goals and purposes and ways in which the educator can assist them in achieving these ends. Positive steps are needed in order to have any impact on the group. There is an additional step which is necessary. It may be that you have to make use of the following suggestions.

Through the direction of the Illinois Association of Vocational Agriculture Teachers, the organization working primarily to serve the interests of agricultural education at the junior college level and which represents the Illinois Chapter of the Illinois Association of Vocational Agriculture Teachers and the Illinois Association of Junior College Teachers of Agriculture went to work. Working separately and together, they developed a plan whereby both groups could most effectively serve the interests of their members and the interests of agricultural education. These changes were accepted by the membership of both associations, and constitutions were amended to bring about the changes.

Under the plan, the Illinois Association of Junior College Teachers of Agriculture maintains its own organization and has its own officers and program of work. Membership in the Illinois Association of Vocational Agriculture Teachers is optional to their members. The junior college association has representation on all standing committees of the vocational agriculture teachers’ organization, including the nominating committee. In addition, they have representation on the Executive Committee of the Illinois Association of Vocational Agriculture Teachers through a district director elected by the junior college association.

Membership

The change in the constitution of the Illinois Association of Vocational Agriculture Teachers brought student membership to a reality. Membership in the association can now be Active, Student, Associate, or Honorary. Student membership is open to anyone who has completed at least two years in a college of agriculture in Illinois or a recognized transfer course in agriculture in a junior college and who has declared the intent to study plant science during the senior year. Associate membership, as in the past, is open to the state supervisory staff, teacher educators, Vocational Agriculture Service staff, and others who have a genuine interest in agriculture and who seek membership.

Student and Associate members have full discussion privileges, but not voting rights. Thus it makes it possible for all segments of agricultural education to work together in any organization for a common goal.

Other Changes

There have been other changes in this organization. Among them are changes in the program of work and through a district director elected by the junior college association.

(Continued on next page)
The Effectiveness of Individualized Instruction

WALTER W. McCARLEY, Central Michigan University
RAYMOND M. CLARK, Michigan State University

Do students learn as well with individualized instruction as when taught by the more traditional lecture-discussion-laboratory method? Can teachers who are prepared to teach according to the lecture-discussion-laboratory method successfully direct individualized instruction with a minimum of re-education when instructional units are provided?

These and many other questions are being asked by teacher educators, teachers, and administrators as they discover that students in vocational agriculture courses have a great diversity of occupational objectives. Individualized instruction may be an effective means of meeting these varied objectives.

Problem

To assist Michigan teachers meet the challenge of helping students reach individual occupational objectives, we prepared a publication titled "A Plan for Individualized Instruction." During 1966-69, a series of individualized instructional units were prepared and tried out by teachers. (See Clark's article on "Individualizing Instruction in Vocational Agriculture" in the November 1969 issue of The Agricultural Education Magazine.)

This article reports the findings of a study designed to determine if high school students learn as well when taught by an individualized instruction program as when taught by the lecture-discussion-laboratory approach. An instructional unit on grading corn according to U.S. grain grading standards was chosen for the study.

Procedure

Samples of grain were assembled, equipment was secured, lesson plans were prepared for the lecture-discussion-laboratory procedure, and an individualized instruction unit including handouts was prepared. Teachers of vocational agriculture were met with the researcher and agreed on methods they would use in teaching one group of students by the lecture-discussion-laboratory method while a second group of students, taught by the same teacher, used the individualized instructional unit. The same equipment, grain samples, and other instructional materials were used in teaching both groups. Each group spent eight days for instruction and two days for pencil-and-paper and laboratory tests.

Four teachers participated in the study which involved 120 junior and senior vocational agriculture students. Students were ranked high, medium, and low academic and interest levels. Achievement was measured after instruction in the ability of the student's ability to interpret questions (pencil-and-paper posttest) relating to the grain determining factors and the student's ability to assign numerical grades (laboratory posttest) to two samples of corn according to U.S. grain grading standards.

Findings

Individualized instruction proved to be superior to the more traditional lecture-discussion-laboratory procedures in the following variables:

- students' gain scores on the pencil-and-paper test
- difference between the two groups in mean scores for total posttest
- difference between the two groups in mean scores on pencil-and-paper posttest

Table 1

<table>
<thead>
<tr>
<th>Variable</th>
<th>Method of Instruction</th>
<th>Rank in Class</th>
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<tbody>
<tr>
<td></td>
<td></td>
<td>High</td>
</tr>
<tr>
<td>Pencil-and-paper</td>
<td>Individualized</td>
<td>175</td>
</tr>
<tr>
<td></td>
<td>Laboratory-Discussion</td>
<td>145</td>
</tr>
<tr>
<td></td>
<td>Laboratory</td>
<td>125</td>
</tr>
<tr>
<td></td>
<td>Individualized</td>
<td>75</td>
</tr>
<tr>
<td></td>
<td>Laboratory-Discussion</td>
<td>95</td>
</tr>
<tr>
<td></td>
<td>Laboratory</td>
<td>85</td>
</tr>
<tr>
<td></td>
<td>Individualized</td>
<td>255</td>
</tr>
<tr>
<td></td>
<td>Laboratory-Discussion</td>
<td>185</td>
</tr>
</tbody>
</table>

DECEMBER, 1970

(Continued on page 155)
One of the basic principles of vocational education in agriculture is that schools provide for directed or supervised experiences in agriculture. Directed or supervised experiences may be obtained on a farm or in farm-related agricultural occupations. Modern agriculture affords many employment opportunities for youth which can be utilized to build sound vocational education programs.

New Program

The Lincoln County School System, Elsberry, Missouri, instituted a new career-oriented program to give students on-the-job training in a cultural field closely related to their occupational objective. One learns by doing. If students are given the opportunity to participate, to apply, to observe the application of the principles and practices to be learned, they will be more qualified to assume a job and become more responsible citizens on completion of high school.

The program is called "Occupational Vocational Agriculture" and is intended for junior and senior students who plan to end their formal education with the completion of high school. However, it is believed that the program will have a tendency to motivate students and encourage them to further their education beyond high school.

In addition to the new program of vocational agriculture, we maintain the basic production courses including Animal Science the freshness in Plant Science the sophomore year, Farm Management, and Advanced Plant and Animal Science the junior and senior years. We believe it is still essential that students have a background in production agriculture in order to serve in agriculturally related occupations which are supporting to production agriculture. Every student is required to take freshmen and sophomore agriculture courses before the advanced courses. Juniors, as well as the seniors, have the choice of taking production agriculture or occupational agriculture.

Placement

Students who select occupational vocational agricultural programs are placed as to their occupational objective and given a list of possible employers. From this list, the students choose the ones they prefer. If these lists do not correspond the teacher-supervisor with the employer places students according to their occupational objectives.

One must be exceptionally careful in selecting employers as work conditions. It is important that the firm is agriculturally related. At present we have two feed exchanges with elevator facilities, a part-time exchange where alternators, regulators, refrigerated, and chutes are overheaded; one auto parts exchange, one super market; one dairy and crop farm milking over 200 cows and farming 5,000 acres along with a beef herd; and one landscaping wholesale-retail nursery with 75 full time employees. Each of these firms could become permanent employment for the students who are enrolled.

There must be close coordination with the employer and the student in order to make the program educational and worthwhile. Each employer talks to the entire class about his particular field and interviews interested students in order that they might have a clear picture of what is expected of them. Each employer along with the teacher, school administrator, and teacher-supervisor plan and agree upon individual training programs to meet the needs of each student.

Coordination

The teacher-supervisor (the vocational agriculture teacher) maintains close touch with the student and the employer to check on accomplishments, to discuss problems, to provide and assist the employer in providing on-the-job instruction, and to evaluate student's experience in cooperation with the employer.

When the students are placed, they begin training with the school year and continue throughout the school year. The first two periods in the day are allotted for on-the-job training. The remainder of the students' day is occupied with other classes. For the two hours of on-the-job training each student receives one hour high school credit and a fair rate of compensation by the employer.

Taking into consideration the different employers, we try to maintain equal wages to alleviate hard feelings among students. During the school year, plans are to increase each student's salary as he progresses toward more responsibility.

We also maintain a retirement agreement with each student which states what the student, the employer, the administrator, the supervisor, and the parents must do.

Evaluation

We believe this is a sound approach to the present needs of students in vocational agriculture. Along with the fact that fewer and fewer students can find permanent employment on the farm, there must be other approaches to meeting the needs of these students. Since most vocational agriculture students have some background in agriculture, there are many agriculturally related jobs that offer opportunities.

Since the program has just been started, we have not been able to evaluate it fairly. However, we can see a change in attitude of the students toward education. They are attending school more regularly, and they are showing a greater interest in furthering their education beyond high school.

One teacher observed, "I have seen a change in attitude in a two-year technical school in land at this school. It will show that there is a need for programs of this type and that the programs benefit those who participate.

The Effectiveness of Individualized Instruction

(Continued from page 152)

difference between the two groups in mean scores on laboratory posttest.

Overall, high interest in agriculture and high academic rank in class were associated with greater achievement by students in the individualized instruction group.

The data reported in Table 1 reveal that in each one student in the high academic group surpassed those lower in academic rank. More important, perhaps, is the fact students in the individualized instruction program scored higher than the lecture-discussion-laboratory group. It is interesting to note for each of the three variables that the mean scores for the high academic, individualized instruction groups are higher than the mean scores for high academic students in the lecture-discussion-laboratory groups. Teachers attribute this finding partially to the fact that the individualized instruction groups covered more of the unit in the allotted time, consequently students were able to complete successfully more of the problems.

Some Observations

Work with teachers who prepared the individualized instruction units and those participating in the research project leads to the following observations.

The role of the teacher changes when individualized instruction is used.

One teacher observed "He wasn't doing his job because he was not in front of the class," leading and directing discussion.

Students like individualized instruction. However, they need a period or two a week to practice skills such as how to use an index, how to attack a problem, how to prepare a report, and how to evaluate their work.

Individualized instruction is equal or superior to traditional lecture-discussion-laboratory procedures for helping students achieve selected learning objectives. Many students with low academic record can achieve as well as higher academic level students when individualized instruction is used.

This student's work center is a fixed equipment where his work is supervised by the shop supervisor.

The AGRICULTURAL EDUCATION MAGAZINE
Structured Occupational Experience
A Part of In-Service Teacher Education

In 1969 the National Advisory Council on Vocational Education issued a failing grade to vocational education in the nation's schools. To remove this failing mark, school personnel are charged to implement occupational training programs which will educate young men and women to a level of adequate employability. In vocational education in agriculture, programs must be initiated that will adequately equip youth for employment in agricultural occupations found more frequently in the city than on the farm. The percentage of enrollees in agricultural occupations and applied biological sciences with a non-farm agricultural occupational objective will continue to increase. This movement may be frightening to a teacher with only limited experience in the non-farm business sector of agriculture.

The Need
Teacher education institutions must accept some of the responsibility for the falling grade vocational education has received. In the past, agriculture teachers who could teach the sciences were endowed with ideal occupational experience. Today, teachers of agricultural occupations need occupational experience in nonfarm agricultural business to supplement and complement experiences in production agriculture. Teacher educators are challenged to provide in-service teacher education programs designed to acquaint teachers with nonfarm agricultural occupations and to assist them in planning relevant training activities for students.

Promising Approach
A program was initiated by the Agricultural Education Division, University of Illinois, to help fill the void in the preparation and experience of in-service secondary and post-secondary teachers of agricultural occupations. The program, consisting of three modules, focused on problems commonly encountered by employees of agricultural firms. The modules were concerned with moving products into agricultural firms, handling personnel and products within agricultural firms, and meeting products from the agricultural firm to the customer. Each module consisted of a course with the last module of the three-course sequence being taught during the summer of 1970. Each course provided a structured, on-the-job occupational experience under the direction of the training station manager and the University coordinator, plus related class sessions in the afternoons.

Agricultural Occupations Teacher Gene Morgan receives instruction on the use of agricultural chemicals as a part of his structured, on-the-job occupational experience. The instruction is provided by the sales manager of an agricultural supply firm during a coordinated visit to the cooperating business. (Photo by Robert W. Walker)

Structured occupational experience is vital for today's teacher candidates. The agriculture teacher is expected to know how his students will be employed. This program provides an excellent opportunity for the teacher to become familiar with the day-to-day operations of an agricultural firm.

In the classroom, the teacher will be able to base lessons and activities on experiences of the agricultural business and will find it easier to relate those experiences back to the students. This type of training is essential for today's agriculture teacher if he is to be effective in preparing young people for today's agricultural business.

Agricultural teachers working in the specialized agricultural firms are as follows:

- Agricultural Supply
  - Mining bulk fertilizer
  - Cultivating a sows
  - Cleaning, bagging and labeling certified seed
  - Formulating feed

- Ornamental Horticulture
  - Fertilizing greenhouse plants
  - Making cut flowers
  - Milling grain
  - Nutritional needs
  - Merchandising flowers

(Continued on next page)
Book Review

News and Views of NVATA

JAMES WALL
Executive Secretary


The author briefly explains what the fields of agriculture, forestry and oceanography are, how they relate to man's modern society and the role fulfilled by technicians. The major portion of the book is devoted, in a very structured manner, to explaining the following concerning various careers for technicians: what type of work done, necessary personal qualifications, educational requirements, list of typical courses that might be taken in a two-year college program, list of entry level jobs, list of advancement possibilities within field, license or certification requirements, working conditions, possible salary ranges, and the future of the above careers. The final portion of the book is a list of two-year colleges offering technical programs in agriculture.

Five prominent agricultural educators plus a former assistant secretary of Agriculture wrote the book in areas of interest to them. The 25 job descriptions sections were written by educators at the college level who are specialists in the particular field of concern or business executives of firms hiring such technicians.

The book is directed to high school students seeking information relative to possible careers or schools offering specific curricula for specific career preparation. It is recommended that single copies be available to high school students in libraries, vocational education offices and/or guidance offices. This book would be more appropriately labeled a reference rather than a classroom text book.

Gerald A. Davison
University of Vermont

Outstanding Young Member Awards

Vocational agriculture is continually faced with a shortage of qualified teachers. Even with increasing college enrollments in teacher education programs, the teacher shortage will continue unless those who have been prepared as teachers enter and remain in the profession. To encourage young men to remain in the profession of teaching vocational agriculture and to encourage and recognize participation in the activities of the National Vocational Agricultural Teachers' Association, an award program is sponsored by United States Steel Corporation in cooperation with the NVATA, United States Steel Corporation provides a certificate to each state association for presentation to its outstanding young teacher at the annual meeting of the association. Each of the six regional winners receives an engraved plaque and an expense paid trip to NVATA and AVA conventions.

The winners in 1970 are:

Region I
John P. Mandt, Boise, Idaho

Region II
Ronald N. Mayeux, Hemner, Louisiana

Region III
Maurice L. Sinerios, West Point, Nebraska

Region IV
Robert Jay Bencham, Troy, Ohio

Region V
Georgia L. Terrell, Citronelle, Alabama

Region VI
J. W. Thomsen, Darvill, Virginia

Career Orientation Awards

There's a big, changing, and challenging world awaiting today's high school graduates. It is a world filled with exciting and rewarding careers. If we as vocational agriculture teachers haven't provided students with all of the facts on agriculture opportunities, the chances are the glitter of the glamour fields will be lost to valuable assets away from agriculture.

The NVATA Agricultural Orientation Awards program was conceived jointly by the NVATA Executive Committee and by New Holland to encourage vocational agricultural teachers to put continuing emphasis on informing students about the opportunities in agriculture and to recognize teachers whose programs are especially worthy of note. The winners of these awards are vocational agriculture teachers whose interest in their students and the future of American agriculture has caused them to devise and conduct strong, innovative career orientation programs. The 1970 winners of the Agricultural Career Orientation Award receiving expense-paid trips to the New Orleans Convention are:

Region I
Donald O. Owen, Columbus, Montana

Region II
Robert V. Arcセン.us, Thibodaux, Louisiana

Region III
Layton G. Peters, New Ulm, Minnesota

Region IV
Lowell M. McLear, Greenville, Ohio

Region V
William H. Tengs, Asheville, North Carolina

Region VI
Harry T. Miller, Frederick, Maryland
Stories in Pictures

A Pennsylvania FFA member participates in an interview as a part of a new contest during FFA Week at The Pennsylvania State University. The contest also involves completing an application for employment and writing a letter of application for a specific job. (Photo by Rodney W. Tullis, Graduate Assistant, The Pennsylvania State University)

Robert W. Walker
University of Illinois

W. J. Karzian (left), Minnesota FFA Executive Secretary, and Harry Birdwell, 1957-58 National FFA President, admire the Honor Roll of FFA Chapters that have participated in "Cure Drives for Camp Courage," Camp Courage, Maple Lake, Minnesota, in a service of the

Minneapolis Society for Crippled Children and Adults, a United Fund agency.