Agricultural Education

November, 1971

Number 5

Agricultural Research, Inc.

This quote from the Rev. Giles C. Ekola, Senior Pastor, Galvryn Lutheran Church, Alexandria, Minnesota: "A common concern between Vocational Agriculture and the farm organization is for the wise use of resources. From the exposures I have had to Vo Ag, I have come to appreciate the stewardship of the earth philosophy that it communicates. The policies of the farm organizations also reveal a continuous concern for constructive soil and water management."

"As a consumer dependent upon American agriculture, I hope that more and more Vo Ag groups and farm organizations will affirm their common ground. As a pastor with relationships with consumers, Vo Ag students, farmers, and members of farm organizations, I believe it is wholesome for these common concerns to be realized more fully."

GENES FOR TOMORROW

Plant explorers are running a critical race against time. Their goal: collect as many of the world's primitive and wild plants as possible in the next 10 years. By then, scientists fear, much important and uncollected germ plasm will be lost.

Everywhere the march of progress, especially in developing countries, is depleting plant communities. Bullruners uproot valuable species in the building of towns, roads, factories, and airports. Dams drown ancient habitats.

Goats graze many plants out of existence. And primitive varieties such as melons, once grown in rich downy for local peasant markets, are no more, their place taken by vegetables cultivated to broaden the appeal of local produce.

Civilization depends upon the crops that are grown far from the centers of origin. Paradoxically, all the major crop plants making up the bounty of U.S. agriculture are not originated within our borders. Our complex agricultural system rests primarily on introduced plants that have been nurtured and dispersed over the centuries by farmers and plant breeders.

Valuable germ plasm has also been collected by USDA plant explorers since 1950, they have made over 150 collecting expeditions and integrated some 330,000 collections. Many situations were put to good use but some were eventually discarded so that today, it remains about one-tenth of the rare introductions in their original form.

The National Safety Council is all out to reduce accidental deaths. Materials and films are available, not only from the Council but also the Red Cross, Guard Council, extension service, manufacturers of water recreation equipment and boats, etc. Also, there are programs you could see such as NSC's "Operation Water Safety" Grade 4th Grade."

NSC has a new water safety titled FIND A FLOAT. Many people drown needlessly each year. You can get a full view of friends on the shores in boats who stand byhelplessly. The people who have within reach must save drowning victims — only they know it. FIND A FLOAT shows the many ordinary items — poles, bridges, spare tires, ears, phone, paddle rafts, etc. — which can be used to keep a person afloat until help can reach him. If viewers could remember to use these or other improvised flotation devices, many lives could be saved.

The film is color, 16 mm, 11-1/2 minute, for NSC members, 10% to governmental agencies. Stock No. 079-51.
The title is derived from an old saying, appropriate for the theme for the issue of Agricultural Education. Probably in no other endeavor could you name as many useful and varied ways in which two segments of our society—business and industry in the private sector and education in the public sector—have found to cooperate.

To some, cooperation is as simple as providing needed financial support for worthy activities. For others, cooperation is getting involved in the planning, organizing, and conducting of vocational experience. Each is important in its own way. Each is necessary if the consumers of the educational product are to be engaged with men and women both young and old who possess the skills, abilities and attitudes that make them capable and satisfied members of the working, marketing force.

The creative reader has probably discerned from the title of contents, the conspicuous absence of the largest agricultural industry—farming—as the authors share with us their experiences in industry and organization cooperation. Perhaps it is a stereotyped dichotomy which we need perpetuate as we conveniently categorize our potential product consumers into farming (or non-business) and non-farming groups. We need to look further into the possibility of the production agriculture industry as a cooperating agency for training students for employment on-farm as well as off-farm careers. In both professional and technical pursuits one of the secrets of success is the ability to understand your client—his problems, his decision processes and his technology.

Certainly this idea is not new. "If you wish to know man well, worship him as you worship your own god." Our Indian brothers knew well the importance of understanding your own human. We have but forgiven an age old idea and have given it modern meaning. Can we then consider our thinking to include the farm or ranch as a suitable training station for young people who are to learn the things necessary to succeed in business?

The idea expressed in upgrading teacher competency in the off-farm business sector are exciting. Teachers have the initiative to go to industries for improvement if this personal knowledge and skills are to be congratulated. Perhaps some may see the importance of life experience to the production agriculture business. The new approach to the development of careers demands that almost all teachers have some knowledge of the industries in which their youthful challenges will seek livelihood. From kindergarten through adult life, the pattern of successful career development calls for teaching staff well versed in knowledge of the world of work. It is not too early to recruit other teachers to join you in your self-enrichment experience. Your invitations need not be limited to others with a vocational education background. If you see a need for cooperation, you need to cooperate.

From the Editor's Desk

Painting With A Broad Brush

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Send articles and pictures to the Editor or to the appropriate Special Editor.

COVER PHOTO
Clifford Satter, right, proceeds with cutting up a quarter of beef under the watchful eye of store owner, Ellis Crawford, center, and Allen McKeen, Vocational Agriculture Instructor, Clarksburg High School, Clarksburg, West Virginia. The photograph was taken during the 1969 agricultural production and harvest activities. The meat was used in the Agricultural Sales and Marketing Project. He worked at Crawford's Foodland store during his senior year and is now employed in the meat department. (Photograph by Gary E. Baum, Program Specialist.)

The Agricultural Education Magazine
School-Industry Cooperation in Mississippi

T. V. Major, Assistant Director
Secondary Vocational Education
State Department of Education
Jackson, Mississippi

Vocational education leaders in Mississippi realize that there has been rapid advancement in achieving balance between agriculture and industry. This balance has created wider opportunities for vocational education in the public schools. The leaders of the vocational agriculture program in Mississippi hold the view that agriculture and industry have a common goal.

Since this is true, one of the most pressing needs facing vocational agriculture is to upgrade the marketable skills of these enrolled in vocational agricultural occupations.

The state department leaders in vocational and technical education in agriculture in cooperation with the agricultural teacher education staff at Mississippi State University believe that it is an innovative approach to relating classroom instruction and work experience in off-farm agricultural occupations. The ultimate goal is to develop vocational agriculture teachers with sufficient competencies to plan, instruct, coordinate, and evaluate programs for preparing individuals for work in off-farm agricultural occupations. In order to accomplish this major goal, the teacher education department set out to develop a professional development program which would offer opportunities for ten selected teachers of vocational agriculture to participate in activities designed to develop them to be able to offer their students work experience in off-farm agricultural occupations.

The first step was to have the teachers gain firsthand experience by working in the agricultural businesses in their respective areas. Three businesses and industries in effect employed teachers on an interim basis for a period of three weeks or more. The types of businesses and industries where the teachers interned were poultry hatcheries; agricultural equipment sales and services; meat processing and marketing; ornamental horticulture;

4. To develop the competency to plan, implement, instruct, coordinate, and evaluate off-farm agricultural occupations programs for disadvantaged students and/or students from low-income families;

5. To develop the competency to coordinate student work experiences in agricultural industries and businesses with school instruction;

6. To develop competencies in evaluation and reporting programs in off-farm agricultural occupations.

The following objectives were identified:

1. To develop the ability to plan for and utilize non-farm agricultural industries personnel in planning, implementing, and teaching off-farm agricultural occupations.

2. To increase competencies in determining the local, state, national and international demands for placing students in off-farm agricultural occupations.

3. To develop understanding and competencies required in the organization and operation of off-farm agricultural industries.

The AGRICULTURAL EDUCATION MAGAZINE
Dr. William T. Spanton, Mr. FFA

E. J. Johnson
Emeritus Program Specialist, U.S.D.A.

Dr. William T. Spanton was born October 25, 1931, on a Bluegrass farm in Kentucky. At the age of five, he enrolled with his parents to Ohio. In their new home the Spanton family lived in a two-room log house, chimed with cloth, until W.T., who is better known as Bill, started to college in 1911. Bill

mother was a country school teacher, and it was from her that he received his elementary instruction. Bill worked his way through Ohio State University, where he received an A.B. in 1915 and a B.S. in Education in 1916. While State Supervisor of Agri-

cultural Education in Rhode Island, he earned a M.A. degree from Brown University in 1924. His Ph.D. came from American University in 1926 with a major in Education and a minor in Philosophy.

As a young teacher in 1941, Spanton was chairman of the Agriculture Education in Schools in the Midwest and, in 1962, he was appointed Director of the National FFA. He was also a member of the FFA Board of Directors from 1962 to 1965. In 1965, Spanton was named National Chairman of the FFA's National FFA Congress and later served as the FFA's National Director from 1965 to 1968. Throughout his career, Spanton was known for his dedication to the organization and its members, and he played a significant role in shaping the future of the FFA and agricultural education in the United States.

The agricultural education movement in the United States began in the late 19th century with the establishment of vocational agriculture programs in schools across the country. These programs were designed to provide students with practical skills and knowledge in agriculture, preparing them for careers in the field. As the demand for agricultural workers increased, the need for such programs became even more urgent.

In the early 20th century, the National FFA Organization was established to support and promote agricultural education. The FFA, which stands for Future Farmers of America, has been an important part of this movement, providing opportunities for students to develop their skills and connect with others who share their interests.

Today, the Agricultural Education program remains an integral part of the education system, preparing students for a wide range of careers in agriculture and related fields. The success of this program depends on the continued support of educators, students, and the community at large.
Agricultural educators have long recognized that vocational agriculture teachers need experience in the subject field if they are to be effective. Many states require that teachers come from a farming background. Many institutions require that teachers possess farming experience but do not provide teachers with needed experiences in off-farm occupations. As we broaden the offerings in agricultural education, a problem of growing concern is that of developing and providing the occupational competency of teachers.

Because agricultural education programs may not always be able to meet the occupational challenges brought about by advancing technology in business and industry, they are failing to provide students with current knowledge and skills needed for successful employment. If teachers are to be effective educators, they must be knowledgeable. For instance, how can teachers keep current their own knowledge and skills in their business and industrial occupations? When and where can they obtain on-the-job experiences in agricultural education? How can they keep their current knowledge and skills in their business and industrial occupations? What steps should teachers take to become familiar with education for the world of work?

What Teachers Can Do

There are many ways in which teachers can upgrade their occupational competency. A meaningful work experience in agricultural businesses and industries can provide the necessary training and experience for the individual teacher. This work experience is more likely to be acquired during the summer. Teachers, however, can extend their experience by taking a leave of absence to work in an industrial setting in which terms of the leave can specify the type of acceptable work experience. Teachers can enroll in an on-the-job training program and summer programs designed to update occupational competency. In addition, they can attend in-service workshops, summer sessions, field trips and lectures by business and industrial personnel. Continuing teachers should strive to update themselves through professional reading by attending professional conferences.

What Teacher Educators Can Do

Higher education institutions and industry could cooperate to bring about an important breakthrough in vocational and technical teaching. The new in-service program for improving occupational competency of teachers would be a cooperative occupational experience program involving business and industry. Such experience programs will be of necessity involved in the new relationships between education, business, institutions and industry.

In an attempt to inform teachers and state supervisors of the programs that have been and are now being used in this direction, programs being conducted by state supervisors of vocational-technical education can provide a basis for the cooperation. How can we cooperate in order to provide meaningful work experience for teachers? What steps are necessary to provide this type of work experience program? What type of work experience programs do you have?
One of the best ways to help rural communities is to lend a hand to their vocational agriculture teachers.

This is the conviction which the board of trustees of the Grain Terminal Foundation has translated into a scholarship program for vocational teachers in the farm-oriented areas in which over 600 local cooperative elevators are located.

In 1950 the program got its start when the Foundation’s trustees approved a grant of $1,000 to be used by the North Dakota Vocational Agriculture Association as scholarships for vocational teachers working toward advanced degrees. The grant was repeated in 1961 and the next year expanded to include similar programs for Minnesota, Montana and South Dakota.

This means that a total of $62,000 has been disbursed in scholarships for vocational teachers in the four states and that the group of teachers who have received Grain Terminal Foundation scholarships now includes several hundred, many of whom have gone on to wind up study for their degrees.

The aim of the program has been to give incentives to vocational teachers to get added training to keep pace with the many changes and growing complexity of modern agriculture.

It was apparent to the Foundation trustees that vocational agriculture in the farm community depends largely on the morale of its teachers. Thus, the decision to offer scholarships to the Foundation’s way to help the teacher grow in professional skill.

We are strong supporters of vocational agriculture because we believe it is the means of finding the lives of people. We believe that vocational agriculture is the greatest of our youth. They can find their place in the great modern agriculture. They can find their place in the farm fields of the future.

The great need in this investment is to be found in the improvement of the quality of farm teachers. We need to improve the quality of farm teachers. We need to improve the quality of farm teachers. We need to improve the quality of farm teachers. We need to improve the quality of farm teachers.

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For this reason, the Foundation created a grant in aid scholarship program to assist teachers in obtaining advanced degrees.

Teaching students about the wide range of jobs in the total field of agriculture is one of the greatest challenges facing the present day vocational agriculture instructor. To conduct classroom instruction in all the areas the teacher must be an expert in each field.

There are many who are not professional teachers. There are many who are not professional teachers. There are many who are not professional teachers. There are many who are not professional teachers.

The success of the vocational agriculture program depends largely on the success of the teacher.

Some of the information students are asked to gather are:

- Specific requirements of the job
- Educational requirements of the job
- Specific responsibilities of the job
- Financial requirements of the job
- Specific responsibilities of the job
- Financial requirements of the job
- Specific responsibilities of the job
- Financial requirements of the job

The instructor feels that the Career Fair is a useful tool for getting students involved in a detailed study of a career of their choice. Not only do students learn about the career, but by viewing other displays and hearing their classmates tell about a career, they gain knowledge of a wide range of careers. Holding an open house and inviting the public to view the displays, they provide some very good public relations. What more effective way can you show the public that vocational agriculture is more than farming?
"Teachers Work In Industry
To Keep Credentials Valid"

Jim Beadley
Delta College
Stockton, California

Does this headline worry you? It shouldn't, because it is not true. Perhaps it may come to pass in the future. We might see all teachers taking time out to return to the world of work. Should schools go on an all-year schedule, teachers would have a real opportunity to be brought up-to-date in their respective fields during one of the "free" quarters.

What is to be gained by a stint in work? First of all, your line of work will increase your knowledge. Another benefit is an improvement in your outlook about your value as a school teacher or, the industry man's view of society. It helps to re-orient your teaching procedures to train your students to move into the big field of employment. If you aren't teaching some "valuable skills" to your people you should take in-service of your teaching program. For today, if that employer cannot make money off the kid, then he cannot afford to hire him. There is no question that a great deal of on-the-job training takes place, but you can teach many skills first.

I found other values from work experience. You learn short-cuts that can be passed on to your classes. Sometimes we school teachers lose sight of the fact that most industry is paid by the hour so to get production, short-cuts are used. For example, during a period this summer in a Cenmic fuel injection shop the pump man was given a job of cleaning the pumps. The navage was much less requiring the pump on a fixture — too much time lost in fastening and unfastening. You learn a great amount of new machinery in the specific trade. This helps in the classroom because you speak the right language and hence can emphasize points with more realism.

Probably the real advantage of work experience for teachers is to move into an unfamiliar area and get technical background and information you need in the classroom. You just cannot beat working with industry for seminars in a certain phase in which you need more competence.

Last, but not least, work experience makes you realize how lucky you are to be a school teacher; good wages for these days you are working (try putting your class teaching time on an hourly basis and figure your hourly wage — you'll be surprised) fringe benefits improving each year; flexibility in your use of time; ample time off; some security, sure, but not those generated by profit and loss.

It all seems much one-sided — all this valuable experience you are getting. But there is some value in being able to do it. If you are on the ball you may receive an industry person's poor opinion of school teachers or the school system. You may be hit only real precariously with that so much of your teaching goes on each year.

You may have a chance to swap ideas about the training of your people. He may have one you never thought about.

How do you line up a job in industry? The following works for me:

1. Make contact early in spring of the following summer.
2. Be sure you get to management and the man you will be dealing with.
3. Drop by occasionally at the plant of business, it helps to entice your interest.
4. If you are to be paid make mistakes of hours, days off, some of weeks to work, starting and ending dates, etc.
5. Do not criticize the operator. After you have been there three hours you may understand certain things are done a certain way.
6. If things are a little sickly, keep something to do. Sweep the basement for shop rags, put away tools. Whether you are paid or not this lets the owner know you are appreciative of his time in the technical training.
7. It helps to get the local newspaper or television stations to run on your training and the school work, but check with the boss.
8. Follow up later in the school with an invitation to your high school, open house or demonstration night. He just wants to be sure on your capacity to carry on your school activities and it is familiar with what you are trying to accomplish your instructional program.

THE AGRICULTURAL EDUCATION MAGAZINE

Blue Power

Dr. Forrest Bear
Dept. of Ag Education
Dept. of Agric. Engineering
University of Minnesota

The tractor specifications, service manuals, charts, visual aids, and other essential data can be cataloged for quick reference for each demonstration. These data can be given in a special file and/or cabinet for ease of operation. The selection and use of one tractor improves the proficiency of the instructor because he has an opportunity to become familiar with the tractor, teaching aids, and the test equipment. The basic principles are taught on the demonstration tractor and exceptions to these rules can be taught with the supplemental film, brochures, slides or by bringing in the other types of tractors.

WHEN

The theory for each agricultural mechanics shop to have a tractor unit is excellent, but the practice is difficult because of the expense involved. The Ford Motor Company, Tractor Division, has alleviated this problem for schools who can qualify for their power train, instructional manuals and power package.

WHERE

To obtain the power train unit a school can contact either the local Ford tractor dealer or the District Administrative Manager at the regional Ford Tractor Operations Office. An application form explaining the Ford 3 cylinder, 240 cubic inch displacement engine operates with an 8 speed manual shift transmission and rear axle used in the University of Minnesota, Department of Agricultural Engineering instructional program.
Changing Curriculum?

Rodney W. Tullback
Department of Agricultural Education
Washington State University
Pullman, Washington

Yes over 100 years, the U.S. Department of Agriculture has engaged in more activities of service to the farmer and the consumer than any other department or agency of the Federal Government.

The department has played a continuous role in the economic growth of America, helping create a technological revolution in agriculture. However, while the Department’s history of accomplishments is impressive, there are still problems of vital concern. Some of these are underconsumption, overproduction, unemployment, and underuse of resources, and the need for greater opportunities for rural people in off-farm occupations.

As agriculture teachers, we have a responsibility to impart basic information about the USDA.

Activities of the USDA

In one way or another the work of the Department of Agriculture touches every American every day.

Employees of the Department help to conserve forests, water, and soil resources and to recover land that is unproductive; inspect meat and poultry, eradicate pests, and protect the National Forests; operate the largest food service industry in the United States; operate the nation’s school lunch program; conduct research in crops, automation, pests, food, the biological sciences, and resources; represent the United States in international meetings and aid in the development of the economies of American agriculture; insure crops against drought, flood, insect, and bird, and provide loans for the development of rural America.

Three and hundreds of other services have a far-reaching effect on the health, welfare, economy, and security of the nation.

Committee Responsibilities and Activities

The county committees are responsible for the county ASCS office located in or near the county seat. They hire a county office manager to administer ASCS farm programs on a day-to-day basis within established state and county ASCS committee guidelines. The manager handles the necessary field and office work to operate the county office.

In the bulletin, “The Farmer Committee System,” the following areas of responsibility are listed for county committees: production adjustment, conservation, price support, storage activities, sugar program, emergency disaster assistance, wool, cropland conversion, food grain, and wheat stabilization programs. Using a student’s farm as an example and showing how the implementation of the above programs would apply to that farm would help the student personalize the information.

The decision necessary in the above programs and in the GIPSA programs is made by the committees. The desires and attitudes of the people involved usually leave some who are unhappy. Therefore, the committees and GIPSA managers must judge these desires and review violations. Some of the changes that they must make are very difficult, requiring a delicate balance between the individual and the public welfare.

When a better understanding of the USDA has been reached by everyone in agriculture, more significant achievements and contributions to society can be realized. As agriculture teachers, we have much to learn and teach about the ASCS.


CORNSTALKS (aphilosophy of work)

Muse evidence of the harvest past
Are the cornstalks, broken and lodged.
Once golden ears they held up to the sun.

Now like men when their work is done.
From single kernels of corn they came.
Sending the green spears above the earth.
In the summer sills and stacks grew
That the grains might fill by nature's grace.

Now from the cornstalks life is gone.
Service to be rendered there is none.
And when they are done.

And he sits scaring in the sun
Without the joy of worthwhile work.
His cornstalks that had had their day.

Might as well return to earth clay.

The most rewarding avenue for man's dignity and intellectual satisfaction is in service to his fellowmen.
Cooperation With Industry for Vocational Education in Outdoor Recreation

Rhode Island has a vast array of outdoor recreational opportunities developed around the marine, aquatic, and forest environments. The Charlebois Regional High School Agricultural Department presently offers a one-year co-op course in outdoor recreation. A survey conducted by the author and co-author West 1973 engaged on a part-time or full-time basis by 100 employers involved in Rhode Island outdoor recreational businesses. The preliminary survey of outdoor recreation involving 32 firms indicated a need for trained students having at least a high school education. Most employers expect the individual to have at least a high school education. The survey reflects that 48 percent of the state employers in the Department of Natural Resources, Division of Parks and Recreation, have less than a high school education. The figure will change as persons with longevity are replaced.

In ski areas, campinggrounds, and camps and camping equipment, golf courses, and other outdoor recreation, the preliminary data indicate that employers desire to become involved in a cooperative work experience program.

In marine recreation, the 21 percent of the firms that would employ high school students in a cooperative work experience program reflects that these businesses are owners operated and employ employees are derived from the family.

A major area not yet included in the survey includes municipal employment of individuals in playground supervisory capacities.

Preliminary Outdoor Recreation Employment Survey, Rhode Island 1971

<table>
<thead>
<tr>
<th>Area</th>
<th>Full Time</th>
<th>Part Time</th>
<th>Total</th>
<th>Minimun Positional Educational Level</th>
</tr>
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<tr>
<td>Outdoor Recreation</td>
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<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Ski Areas and Equipment</td>
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<td>50</td>
<td>160</td>
<td>100%</td>
</tr>
<tr>
<td>Campgrounds, Camps and Equipment</td>
<td>100</td>
<td>50</td>
<td>150</td>
<td>100%</td>
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<td>Madore Recreation, Yacht Club, Beaches, Beach Clubs, Boat Tours</td>
<td>100</td>
<td>50</td>
<td>150</td>
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<tr>
<td>Marina Sites and Services</td>
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<td>150</td>
<td>100%</td>
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<td>Golf Courses</td>
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<td>150</td>
<td>100%</td>
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<td>Other Outdoor Recreation, Stables and Trail Riding, Golf Courses</td>
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<tr>
<td>Environmental Education</td>
<td>100</td>
<td>50</td>
<td>150</td>
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</table>

Environmental Education and Recreation

The Charlebois program serves to acquaint the individual student with the environment and the opportunities available in the area of outdoor recreation. The environment is emphasized in environmental management and appreciation are prerequisites for all outdoor recreational opportunities both from a point of pleasure and occupational potential.

The course is developed around a premise of pleasure by doing. It is the purpose of the program to expose the individual to as many of the various job categories as possible through group experiences gained in the classroom and on the 400 acre land management laboratory. The land is privately owned but managed by the agricultural students.

Since the outdoor recreational placement opportunities in Rhode Island through the state. A cooperative agreement has been established between the students of the high school agriculture department and the land owner under The Environmental Assistance Program. The Forestry Department and the Soil Conservation Service are cooperating in the planting of 1500 white pine and larch seedlings, thinning and

Agri-Business Leadership and Management

Another area considered involves personal relations and how an individual interacts with the public. Personality and salesmanship are observed during this phase of instruction. Financing and expenses are also considered. The most common question asked by a student who is venturing into a recreational enterprise is, "How much will it cost to establish the enterprise?" During the course of study, planning and operational costs of the various outdoor recreational areas are discussed so that the student will know what is involved if he is to enter into a business of his own.

Outdoor Management Lab

In outdoor management, a 17-station ecology laboratory is being developed by the students using varied terrestrial and aquatic environments. Students are prepping trails and sites. A study is being developed for each such station. Agriculture students will be available to assist instructors in science and elementary education when the laboratory is opened to students.

Pruning is accomplished by students doing the propagation of a crop. Goods adapt well to all phases of the outdoor recreation offering.

Associated Areas

Although Rhode Island does not feature an intense snow belt, there are four ski areas within the state. Two of these are within the vicinity of the school. For job opportunities in ski areas, students are familiarized with ski equipment and techniques. Students are encouraged to ski and gain more understanding of the pleasure of skiing. Students also receive orientations in the operation of ski areas and snow making.

Charlebois Regional High School exists within a snowshoe community and this natural environment affords the student a natural laboratory in which an understanding of marine recreation may be gained. A study on beach management, lifeguarding, and associated occupations coincide with this phase of occupational training.

In golf, the student becomes familiar with the game and gains an appreciation of golf course design and turf maintenance. Rhode Island has over fifty gold courses and there are many jobs available to agricultural students on these courses both on a seasonal basis while the student is in school and as a full-time occupation following graduation.

For playground supervision opportunities, the students become familiar with arts and crafts, carrying out and demonstrating techniques in leather, wood, wire, beads, and paint. Drama, music, and games associated with playgrounds are also experienced. In the spring of 1972 the Charlebois Agricultural students will work cooperatively with
elementary schools within the region in introducing a playground program to include the previously mentioned areas. The experience gained in dealing with the elementary school students will be valuable during summer placement in playground supervisory positions.

The Product And The Consumer

Allen D. Geissler
Consultant, Agricultural Education
Department of Public Instruction
Indianapolis, Indiana

In the present consumer-oriented society, business and industry constantly determine the market potential for a vast and changing array of products. Market research attempts to determine what products are consumed, why consumers choose products, and what products will be purchased in the future. Analogous to the products in the American marketplace, vocational agriculture in the local educational system. The opinion of the consumer, in this case, the student and the potential employer, is an integral factor in determining market potential. To encourage increased acceptance of an educational program, realizing the needs for consumer information regarding vocational agriculture in Indiana, an extensive four-year study of student opinion regarding program emphases was conducted during 1963-1971.

Over fifty percent of the students enrolled in vocational agriculture in Indiana responded to a comprehensive instrument. A random sample of junior high schools was selected as "potential consumers" of vocational agriculture. "Present Consumers" of vocational agriculture reflected a preference for programs currently being offered in local schools. They also indicated a decreasing preference for training in production agriculture as an advantage of vocational agriculture. The most apparent change was a decrease in interest in the earlier grade levels. The "First Choice" interest response of vocational agriculture varied from 74.6% in the 7th grade to 15.1% in the 9th grade. The study showed the trend of decreased interest in production agriculture to be continuing. A summary of the study by grade level is presented in Table II.

The Student Opinion Instrument

A one-page instrument was administered by teachers and completed by students. Seven groupings of vocational agriculture interests based upon a survey of U.S. Office of Education classifications and by ranking by students. A brief description of the agriculture careers and possible occupations was provided.

Eighty-two percent of the vocational agriculture departments in Indiana in 1970 utilized a curriculum based on production agriculture and mechanical agriculture. From the survey results, one may infer that student opinion reflects the instructional emphasis of local programs.

In a similar situation, one might expect to find that Spanish is the dominant language in the three languages at high school class.

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The AGRICULTURAL EDUCATION MAGAZINE

BOOK REVIEWS


This handbook and journal devoted to car developement not only sets out to inform interested readers in recent years, there is additional need for the present publication. A trend accompanying a rapidly expanding field of endeavor is greater and more frequent, specialization has re

The opinion instrument utilized at the high school level was also printed for all 7th and 8th grade students in a random sample of ten junior high schools.

The data from junior high students indicated that some adjustments in curriculum away from the traditional agricul

The method to identify the present and potential consumers of vocational agriculture is expected from the program. The results only show a slight increase in student opinion as it relates to vocational agriculture. The study appears to be more for the need to study the impacts of student opinion in selection of program in vocational agriculture.
Industry Honors Contributions To Food Production

Rich G. Hansen
Geigy Agricultural Chemicals
Ardsley, New York

Two scientists and two educators were recent annual meeting recipients of eight Geigy Recognition Awards, which recognize outstanding contributors to agriculture and food production.

One member from each of eight leading professional societies is honored annually. Each recipient is presented a specially designed bronze trophy of a corn seedling symbolizing our abundant food production system and a guest of Geigy Agricultural Chemicals for a 10-day tour of agricultural research facilities and farms in Europe.

The eight recipients were: Dr. Donald F. Appleby, Weed Science Society of America; Dr. Robert E. Doehrer, American Society of Agronomy; Oliver H. Hamrick, Jr., National Association of County Agricultural Agents; and Donald Kahler, National Vocational Agricultural Teachers' Association.

The first four 1971 awards went to: Donald F. Appleby, Crop Science Society of America; George W. Gilliom, American Agricultural Editors Association; James R. McGuire, Newspaper Farm Editors' Association; and Dr. O. H. Graham, Ecological Society of America.

Each was honored at his organization's recent annual meeting. The individual associations set their own criteria for picking their winner and assign a committee to perform these duties.

Florida Agribusiness Leadership Gets Involved

W. R. Jeffries
Assistant Administrator
State Department of Education
Tallahassee, Florida

One of the major concerns of this committee is to assist in the establishment of programs which will keep programs realistic in the light of skills and knowledge required in the rapidly changing agriculture industry. Because committee members have the essential, specialized knowledge of competencies required, they take an active part in verifying course content. The committee also helps in determining whether or not the programs currently offered in local areas relate to future needs.

Leaders in Florida agriculture and education feel that with a comprehensive career education program, more interest can be generated at an early age and that the student will become more interested in agricultural opportunities in agriculture. They also feel that agricultural courses offered and directed by leading agricultural educators will encourage students to continue their education in Florida and seek employment in the industry.

Already, two top-notch agricultural instructors have been recruited as a result of recommendations of the advisory subcommittee for the Florida Agricultural Education Board. The inclusion of qualified teaching staff is one of the most important factors in planning and implementing an outstanding program. One example is the Landscape and Golf Course Operations Program at Lake City Community College that received the assistance of the committee in locating qualified teaching personnel and with industry experience. The committee also worked with curriculum development and establishing the support of the industry.

With the advice and recommendations of the Forestry subcommittee and joint planning with the Division of Forestry, new programs in Forestry in the high schools, area vocational technical centers, and community colleges have been instituted. As a result of many hours of dedicated work of the Ornamental Horticulture-Furture committee, job titles, descriptions, and analyses have been developed for the first time for occupations associated with the professional level.

One primary function of the Advisory Committee is to assist in the selection and placement of students in training situations within the industry. Members of the committee believe that
Integrating Curriculum with Industry Needs

Janesville, a school district of 50,000, has less than 50 full-time farmers and 200 school children in K thru 12th grade. Obviously the traditional agriculture program needs to expand. What kind of agriculture program for Janesville? With many local agri-businesses in Janesville, a need existed for "off the farm" training. What kind of program would attract urban, boys and girls with a genuine interest in agriculture? What are the needs of the students and the local agri-businesses? What is the relationship of the curriculum and the industry? How can we utilize the talents and resources of each sector in the community?

Course of Study

The entire course of study at Janesville has been agri-business oriented.

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<th>Agriculture Survey</th>
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THE AGRICULTURAL EDUCATION MAGAZINE

This combination of classroom instruction, project work, and industry training provides the necessary basis for our students to pursue careers in agriculture.
Vocational Education In A State Correctional Institution

Larry Myers, Program Coordinator
Weeks School, Vergennes, Vermont

Dr. Gerald R. Fuller, Chairman
Department of Vocational, Technical and Extension Education
University of Vermont, Burlington

In a state institution serving the needs of disadvantaged children, a new program is offered to give the educational and vocational needs of a correctional institution

The educational Reeducational campus is the Weeks School in Vergennes, Vermont. Its court committed students come from throughout the state and currently number over 200. The Weeks School program is community oriented and focuses upon meeting the special needs of its students in the areas of education and social adjustment. Small classes, close supervision and counseling, and individual counseling enhance its program. Each student is assigned a counselor in a one-on-one counseling system. Students of the program are exposed to vocational and educational opportunities for the first time in their lives. The main program is designed to provide students with the skills and knowledge necessary for gainful employment upon release from the institution.

The program, funded under the 1968 Vocational Education Amendments, is set up to provide a vocational agriculture course in the ninth grade, the addition of a co-op type job training for older students in need, and the development of an introductory course, "Orientation to Vocational Education," for ninth grade students.

The vocational agriculture program is based on the needs of agriculture and agribusiness in the State of Vermont. "Weeks School is a regular course offering at Vergennes Union High School. Its objective is to provide students with the agricultural education which includes the development of ability to manage a business and the knowledge necessary to be successful in agribusiness.

Vocational Education is going through a revolution that is now being generally accepted in the State of Vermont and throughout the country. The recent trend is towards the development of an integrated system of education which includes the study of agriculture, business, and the arts. The Weeks School program is a part of this trend and is designed to provide students with the skills and knowledge necessary for gainful employment upon release from the institution.

The support of each occupational area is contributing to one or more of the skills and areas of the curriculum. To do this, occupational teachers should be employed for twelve months. By this time, the state and national vocational education programs are expected to be in operation. The support of each occupational area is contributing to one or more of the skills and areas of the curriculum. To do this, occupational teachers should be employed for twelve months. By this time, the state and national vocational education programs are expected to be in operation.
training to a large segment of the population.

In some states, some agricultural teachers' employment has thus far been limited to twelve months. This has been distressing and demoralizing to teachers and others who know of the contribution that agricultural teachers have made through employment for twelve months.

It appears to the writer that administrators should view with favor the employment for twelve months of agricultural teachers who have approved activities planned for the summer.

The summer program should serve as a blueprint for the agriculture teacher by revealing what is planned for each week, and sometimes, each day. The major accomplishments should be recorded along with student experiences, and superintendent, and of course, the superintendent, and or teachers should publish daily activity notes.

Teachers who are employed for twelve months should prepare a summer program of activities and receive administrative approval before June 1. After approval of the program, copies should be given the principal, superintendent, local vocational director, and the chairman of the advisory committee.

Teachers should take into account that the superintendent, principal, local vocational directors, and any committee to be involved in deciding what activities the teacher includes in his summer program. The following is a program of summer activities for agriculture teachers:

1. Attend and participate in interservice educational activities
   a. Annual Summer Vs-Ag Teacher's Conference
   b. Workshop in such areas as: Ornamental Horticulture, Farm Management, Weeds, Tractor Repair

2. Work on school farms or in school gardens
   a. Work with students in the garden
   b. Enroll students in the garden
   c. Conduct demonstrations on various crops
   d. Prepare students for the state garden show

3. Attend FFA Leadership School or other leadership program
4. Hold regular FFA meetings for members
5. Have FFA Field Day and involve parents
6. Plan and develop instructional programs
   a. Make lesson plans, prepare, select, and organize teaching materials
7. Review and update curricular materials

Evaluate programs conducted previous year.

Supervise students' Supervised Agricultural Experience (SAE) projects.

Conduct agricultural mechanics instruction for community clientele.

Assist with Community Development Programs.

Keep records up-to-date.

Repair and maintain departmental equipment.

Cooperate with school officials on administrative problems in your program.

Many teachers have greenhouses which require considerable work, but at the same time could provide a teaching program for boys and girls, as well as others in the community during the summer. These teachers who do have adequate facilities need to work with the administration in getting such.

Teachers should consider establishing forestry programs at or near the school. Forestry and horticulture programs contribute to the elimination of pollution about which there is so much concern.

In addition, teachers should survey the basic needs of the school area. These surveys play an important role in maintaining and follow-up.

Where the teacher in North Carolina has been employed for twelve months, the school month is good. The teacher is in contact constantly with the leadership in the community. Consequently, he can serve as a liaison between the school and the community, (with people), and interpret the efforts being made to improve the total educational enterprise to the public.

**News to Me**

**Enrollments in Ag-Business**

The secondary enrollments in agriculture reached an all-time high of 173,000 in 1971, compared to 16,000 over FY-1969. Of this enrollment, 157,000 were in vocational agriculture classes, and 12,000 in off-campus agri-business classes. This is an increase of 8,000 over the same period in 1970.

**Future of Dairy Farms**

Experts differ in their predictions for the future of the dairy industry. One USDA economist predicts dairy shortages will decrease while a university dairy specialist thinks increased government purchases will eradicate the dairy surplus completely.

**RETURN OVER FEED INDICATES PROFIT**

The dollar return over feed cost, the return for $100 of feed can be whether or not a livestock breeder can make money. The maximum is approximately $100 per head on cows. The breeder with the full knowledge of the limitations under which the livestock are being raised, can analyze the maximum profit on the status quo. By 1980 they expect the following changes to occur:

- Half of the 60,000 dairy farms will have been eliminated by then.
- Commercial dairy farms will be strictly practical. Commercial dairy farms with sales over $100,000 will double.
- Cow numbers will decline about 30 percent to nine or 10 million with production per cow increasing to 12,000 pounds annually.
- Number of cows per farm will increase and the average number per dairy farm will be 75.
- Larger farms and increased production will result in high milk production per man from 250,000 to 300,000 or more.

**Themes for Future Issues**

February - The Farm Management Approach to Teaching Vocational Agriculture
March - Competencies or Careers in Agriculture
April - Science of the Out-of-School Group
May - Innovations in Family Education
June - Teaching Methods

**FAYETTEVILLE, Ar.** Dr. James A. Schriver, Associate Professor of Vocational Education at the University of Arkansas main campus, will journey to Turkey in September to serve as director of the Seminar on Agricultural Education for West Asian Countries.

**Fayetteville** - Dr. Schriver holds a B.S. degree from Southwest Texas State, an M.Ed. from the University of Arkansas, and a Ph.D. degree from Cornell. He lives with his family in Arkansas, where he serves as mayor.
Stories in Pictures

Robert W. Walker
University of Illinois

Conservation of renewable natural resources, game and wildlife are everybody's concern. The Wadena, Minnesota FFA, in cooperation with more than 140 conservation, fraternal, sportsmen, farm, agribusiness, and school groups participated in local programs. Major objectives are to preserve and improve environment, increase wildlife numbers, and work together for improved natural resources in the future. (Photo furnished by W. Kortesmaki.)

Charles Workman, right, a 1969 graduate of Greenbrier East High School, Lewisburg, West Virginia, shows his Vocational Agriculture instructor, Nelson Daley, how to properly lubricate a farm machine. Charles completed four years of Vocational Agriculture and one year of Agronomy Mechanics and is employed by Kyle's Garage where he does a considerable amount of farm machinery repair. (Photo by Guy E. G.)