STORIES IN PICTURES

by
Jasper S. Lee

SUPERVISED OCCUPATIONAL EXPERIENCE PROGRAM IN AGRICULTURAL SUPPLIES AND SERVICES — These two photographs depict an important triangle of key participants in the cooperative's educational program: the student, the instructor, and the business. The first photograph shows a student (left) being instructed by his teacher (right). The second photograph shows a teacher and a student in a cooperative classroom setting.

ELECTRICAL POWER IS AN IMPORTANT SUPPLY — Students enrolled in electrical power production at Ellis (Missouri) High School are being trained for careers in this rapidly growing field. They are shown here working on a project in the school's electrical power production lab. (Photo by James W. Betts, Missouri Department of Education)

LUMBER IS AN IMPORTANT SUPPLY — The importance of lumber as an important raw material in the construction industry is being demonstrated through the activities of the Lumber and Wood Products Cooperative. Students are shown here working on a project involving the processing of lumber. (Photo by Max Amberson, Montana State University)

FFA CONTESTS REQUIRE CONCENTRATION — These photographs show individuals competing in the recent National FFA Judging Contest. The photo on the left shows a competitor in the Agricultural Mechanics Contest. The photo on the right shows a competitor in the Market Livestock Judging Contest. (Photos by Dan Beaver, The National FFA Center)

AGRICULTURAL EDUCATION

Volume 48 Number 10
April 1976

Theme — CAREER EXPLORATION
Career Education in Its Place

Elizabeth B. McMillan

Career Exploration instead of Career Education or Career Orientation is the theme of this issue of the MAGAZINE. Exploration and choosing the right occupation is an important aspect of vocational education. Before it became a phase of career education and still is an integral part of vocational education.

Vocational teachers, who are in short supply, are needed to prepare students for occupations and, as a result, to help them choose occupations in which they will be satisfied.

Vocational education needs to divert scarce time, energy and money to orient necessary people to occupations. Vocational education has enough to do without trying to change the whole educational system as was the goal of Career Education.

Careers have been allocated to career education. Those who are in charge of career education can see to it that all education outside of vocational education is oriented to focus upon the world of work. That same career education function is appropriate at all levels of education. If in vocational, technical and professional education, we are preparing people for specific employment as we have been for years, we do not need to have anyone with a career education title telling us how to do our work.

Vocational, technical and professional education, I agree, should be active in guiding people into the world of work. Experiences and the choice of an occupation is the business of vocational, technical and professional education. I have no objections to a definition of career education which includes vocational, technical and professional education, but I do object to an administrative structure with career education above all occupational education. It must be in the high school, the university or the USOE. Career education is something else, I think, than the curricular implementation of guidance.

The Basics and Exploration

Dr. George L. O’Kelley, Jr., a teacher educator in agriculture at the University of Georgia, has discussed the practice of giving vocational education to younger and younger students at the expense of post secondary and adult education in a speech to the American Association of Teacher Educators in Agriculture. I question the practice of giving vocational education to younger and younger people at the expense of reading, writing, and arithmetic. I believe that many

(Coordinated on next page)

Career Exploration

FROM YOUR EDITOR

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(Coordinated on next page)
other vocational educators old enough to have children in junior high school agree with me but are afraid to express it. With over seventy percent of the teachers in junior high school, it is difficult for them to have enough experience with that age group to realize that the hands-on activity is an important part of any educational program. It is primarily for children who are not used to teaching the skill to 11-14 year olds. The opportunity to let pupils do the exploring through activities in the shop or the greenhouse is just too great for any teacher to resist. The teachers want to make it interesting and they're permitted to think of the things that are most enjoyable immediately as eleven or twelve year olds. Perhaps ag teachers are keeping up with the competition; the pupils might choose office education or home economics.

Don't be guilty of using up the middle school or junior high school pupils' time underly with skills training. The constantly declining attitude scores of American high school seniors indicates that another kind of skills training in basic subjects needs to be increased, not decreased in the junior high school.

The vocational educators' interest is preparation for occupations along with adequate attention to occupational selection. Vocational education and job exploration activities are not using time of many junior high school pupils that should be spent on academic work. For most of the students in schools where vocational agriculture is taught today, job preparation begins in the middle and upper grades, ninth through twelfth grade. Training for skilled occupations or even families of occupations should be in the middle grades and above.

The student should, by this time, be able to identify who he is and what his interests and abilities are, to make decisions and prepare to adjust and change those decisions, to formulate some preferences for particular occupations, and to identify various lifestyles he may wish to pursue. A tentative decision may be made by grade nine in order to begin the PREPARATION STAGE. This stage will last as long as necessary for the acquisition of skills and knowledge needed to enter and progress through one's occupational career.

Career exploration programs will assist the student in making critical career choices by providing them with visible "world of work" experiences involving them in the decision-making process, and having them participate in work experiences associated with their career choices. Such experiences at the middle school level give confidence to the ability to make the student less vulnerable to the critics of career education pointed out by Mrs. Winkle. The student in part in career exploration programs can observe that workers handle, buy, sell, or hire; they are the servers of our society. Career exploration programs help him to develop the philosophy that work is a prelude (Concluded on page 35).

Bill Pugh  
Ag Co-op Coordinator  
Corpus Christi, Texas

The awareness stage, which covers the preschool period through grade six, is a stage during which the child becomes interested in what adults do. It is interested in knowing how they get their jobs and services which he enjoys. He also enjoys "putting on an occupational role" by playing the many occupations with which he has become acquainted. The exploration stage, which covers grades seven and eight and the junior high school level, is a time for some actual exploring of a variety of occupations. It is a time of self-assessment and of consideration of the various types of careers available to the individual. The student should, by this time, be able to identify who he is and what his interests and abilities are, to make decisions and prepare to adjust and change those decisions, to formulate some preferences for particular occupations, and to identify various lifestyles he may wish to pursue. A tentative decision may be made by grade nine in order to begin the PREPARATION STAGE. This stage will last as long as necessary for the acquisition of skills and knowledge needed to enter and progress through one's occupational career.

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COMING ISSUES COMING ISSUES COMING ISSUES

MAY — In-Service Education  
JUNE — The Summer Program  
JULY — Attitudes and Values for Employment  
AUGUST — Secondary Programs for the Talented

SEPTMBER — Planning and Managing School Facilities for Ag  
OCTOBER — Preparing Teachers of Vocational Agriculture  
NOVEMBER — Teacher Organizations and Professionalism  
DECEMBER — More Effective Teaching

THE AGRICULTURAL EDUCATION MAGAZINE
High School Beef Farm is Career Education Center

Ray Herren
Instructor of Agricultural
Gaysville, Alabama

The study of careers is likely as old as education itself, taking many forms over the years both in and out of the classroom. Understanding that students often select a career based on what is available at graduation time, a program was designed to provide an opportunity for Seymour High School students to study a number of work areas that were of interest during their junior and senior high school years.

Junior High Involvement
The group involved in our program includes both in-school as well as out-of-school personnel. I will start with our Junior High program. The 7th and 8th grade career course is presented in part 1. The 7th grade includes a study of four clusters: Agriculture and Consumer; Fibers and Health, Office and Distribution; and Visual and Audio Communications. This is a required block course that features student involvements by rotating through a cluster of each week.

The eighth grade is also 36 weeks in length and features an enterprise system involving four areas of instruction: Manufacturing and Transportation; Business and Marketing; Commercial Agriculture, and Animal Science and Conservation. Students are rotated through areas of activities that include designing, organizing, staffing, financing and operating a corporation that develops and manufactures a product, realizes a profit or loss, and finally liquidates. All instruction is geared to assist the student in making personal, educational and occupational decisions.

This program is conducted by four of our junior high instructors, coordinated by our local vocational education coordinator, aided by others, and guided by our guidance staff. Occupational study and career investigation are conducted throughout the two-year span.

For the 9th through 12th grades, I will describe only our agriculture/agribusiness program although many Career Exploration is going on throughout the many areas and classes of our school system.

Our ninth grade class, Agricultural Survey, is an exploratory course intended to allow students to become familiar with the many phases of agriculture. There are 15 units of varying length that present the opportunity to become acquainted with the many areas to find one of interest that the student might follow throughout the program. Careers are discussed in many of the units as well as a special unit to which students select three areas of employment they wish to give special study. A separate phase has been added whereby each of six-letter units are offered for those wishing to look at agriculture but not for a full year.
A Package Approach to Career Exploration

David G. Craig
Agriculture Education
University of Tennessee

Two of the most important life decisions a person makes are who one marries and which occupation to pursue. These decisions, made wisely, require much preparation and thought. These two particular choices are not necessarily independent, because one usually has a great effect on the other.

Career Exploration

Career exploration usually includes grades 7 through 10. In relationship to the career education process, it follows several years of awareness experience and occurs before specific occupational education in the senior high school grades. According to Webster, exploration means to seek, to search carefully; to systematically look for. Career exploration involves experiences with one or two occupational clusters. It proposes to prepare individuals for job entry and/or more specific skill training in a job field.

Typical students in this grade range are between 12 to 16 years old and they are interested in the challenge to touch. These students are undergoing many physical and emotional changes. The teacher has the following questions: What are the traditional value systems, and how are they changing? The teacher must answer these questions effectively; otherwise, career exploration may become obstruction.

Career exploration is needed by vocational agricultural students, by other vocational students, and by interested general education students. Teachers, guidance personnel, and business managers coordinate needed agricultural packages to supplement career development units. The packages will be used by many people in the community development activities.

Some examples of practical agricultural experiences are needed by vocational agricultural students, by other vocational students, and by interested general education students. Teachers, guidance personnel, and business managers coordinate needed agricultural packages to supplement career development units. The packages will be used by many people in the community development activities.

High School BEEF FARM

In preparing for and participating successfully in career exploration, the student learned the proper procedures for handling, feeding, and moving the animals. After these, the students sold the steers to the community as bee beef. The students receive some 50 cents per pound to pay for the feed, and the balance of the profit is returned to the school to pay for the rent of the barn, feed, and other expenses. The students are then responsible for the care of the animals. Following care, carcasses yields, and carcasses are again sold for profit. The students then receive a percentage of the proceeds as their share of the profit.

Continued

Packaged Approach

The package consists of a variety of activities, including classroom instruction, laboratory work, and field experiences. The package should include vocabulary words, learning activities, and appropriate reading materials. The package should be designed to meet the needs of the specific grade level and to provide a comprehensive understanding of the agricultural area.

Continued

Agricultural Mechanics: Agricultural Supply
Agricultural supply refers to the purchasing and selling of materials and equipment needed for agricultural production. The package should include a list of materials and equipment needed for agricultural supply, including supplies, tools, and equipment. The package should also include information on where to purchase these materials and equipment.

Continued

CAREER STUDY ON THE JOB

Students enrolled in career study on the job will apply to all areas of employment. Classroom work in the senior year is largely in their area of employment. Guidance for a better employee. Subject matter in their area is studied, with help from the shop and laboratory work being involved whenever possible. Training at local places of business for an average of three hours a day, mostly in the afternoons, exploring that business while gaining skills in that occupation.

Continued

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Role of the FFA in Career Education

Charles Byers
Teacher Educator
University of Kentucky

Career education involves helping people make career choices through awareness and exploration and then preparation for chosen careers through specialized training. Also, everyone needs development in leadership, citizenship, and cooperation, as well as skills in human relations which prepare them to be valued employees and effective members of viable families. All of these needs may be provided for through career education.

There are three generally accepted phases in the total program of career education. They are: 1) awareness—to lead students to become aware of careers in the world of work; 2) exploration—to provide students an opportunity to explore a variety of occupations in the world of work; and 3) preparation—to prepare students for a specific occupation. In general, it is felt that the schools should focus on the awareness phase from kindergarten through the ninth grade, the exploration phase in the junior high (grades 7-8 or 7-9), and the preparation phase in grades 9-12 or 10-12. However, all awareness will not (and should not) be confined to kindergarten through grade 8; neither will (or should) all preparation be limited to grades 9-12 or 10-12. There may be a combination of awareness into exploration and exploration into preparation, and so on.

The FFA—A Potential and Challenging Contributor

Traditionally, most local FFA chapter activities have been related to the preparation phase of career education. However, the many activities listed here have been given to the awareness and exploration phases of careers in agriculture before students enroll in agricultural education and have the limited offerings in vocational education at the 9th and 10th grade levels (particularly for boys), has resulted in agriculture students and the FFA being an awareness and/or exploratory experience for many students. Emphasis on career education in agricultural education (and the FFA) will be in grades 9 through 12 (grades 7 and 8 will also be involved) and should focus on career preparation, but for some students it will continue to be awareness and/or exploration.

That which has put the FFA in the elite class is the relationship of FFA activities to classroom instruction. Perhaps no other organization has developed as effectively an approach for making the local program of activities contributive to the instructional program. The FFA, when properly used, can motivate students to become competitive in their chosen careers. Since its inception, the FFA has been used by teachers of agriculture as a vehicle to motivate students to study and develop a career in agriculture. This has resulted in a large amount of high-quality learning. This raises a basic question: What can and should the FFA contribute to the three phases of career education?

Potential of the FFA in Career Awareness

The FFA can make a significant and meaningful contribution to the awareness phase of career education. Some meaningful, practical, and beneficial activities that a local FFA chapter can become involved in at the elementary grades (K-6) are:

1. Provide elementary teachers, by grades, with the following agriculture materials:
   - Books, magazines, leaflets, pamphlets, posters, and slides
   - Videotapes and/or audio tapes of interviews with farmers, agricultural business employees, and employees in agricultural agencies
   - Exhibits and bulletin board materials
   - Lists of Urioste and movies and where they can be secured
   - A list of the major agricultural occupations and their importance to the county (farming, businesses, and agencies)
   - Names of individuals (resource persons) who can be asked to come into the classroom to give a talk

2. The FFA may assist in securing such persons and in arranging their discussions with these students.

3. Names of FFA members who can meet with classes and talk about specific areas of agriculture

4. A list of farms and agricultural businesses suitable for field trips

5. Make work-agriculture and equipment available for use for or have an open house conducted by local FFA members

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THE AGRICULTURAL EDUCATION MAGAZINE

April, 1974

CONTINUED

ROLE OF THE FFA IN CAREER ED

1. Sponsor an agricultural field day. This is an excellent FFA activity. The Block and Bridge Club at the University of Kentucky held such an activity in the spring of 1973. Here is the report which appeared in the College of Agriculture’s student newspaper:

“The most successful Block and Bridge activity this semester was Turn Day. This was the first such activity for the club and by the results and responses from 60,000 students, teachers, and administrators, it looks like it will be continued by the club in future years.”

Turn Day was an activity designed to be educational value to the elementary-age children of Fayette County by letting them tour the University of Kentucky Agricultural Research Farm. Turn Day consisted of a guided tour of the entire farm.

Not only did the children enjoy the tour and learn a great deal, the Black and Bridge Club members had fun as well, and they possibly learned even more than the children.

Most local FFA chapters should be able to organize and conduct something very similar, but on a smaller scale, at a local farm in the community.

Involvement of the FFA in Exploring the World of Work in Agriculture

Activities for junior high students (grades 7-8 or 7-9) might include the following:

1. Provide junior high students an opportunity to get “hands-on” experiences such as:
   - Helping FFA members get animals ready for show—washing, feeding, grooming
   - Helping members get crops ready for display
   - Helping feed animals and clean pens
   - Helping with programs and activities
   - Helping students with the construction of projects in the agriculture mechanics laboratory
   - Spreading seed on fall crops
   - Taking a tour with co-op students to the places where they work and hear them explain their jobs and responsibilities
   - Helping members with the school farm—preparing land, planting, cultivating, harvesting, etc.
   - Sponsor or co-sponsor a career education day. Many colleges hold career days for high school students. These days are designed to help orient students to college and provide them with a preview of various courses of study or major fields of study. It seems that such an orientation to high school for junior high students would be an excellent idea. Most junior high school students are not aware of the various career education programs available to them and are unsure about the careers that are open to them. The day could be planned to provide the students with an overview of high school and a chance to learn some specifics about the different programs.

2. The FFA—Tremendous Opportunity in Career Preparation

In the preparation for a vocation (grades 9-12 or 10-12), the FFA can make a significant contribution. Preparing students for careers is a national emphasis. A recent examination of the activities in the “Supervised Agricultural Occupation Committees” of several FFA chapters in Kentucky revealed that activities are almost exclusively related to farming and gardening. Herein is a major program dominated by activities in supplies and services, horticulture, and mechanics. Perhaps the teachers and the chapter members in these chapters should evaluate the current programs to see if they are not effective in motivating the local instructional program. Also, the chapter should develop other activities that would motivate specific learnings in the other areas of the agricultural business.

The FFA at the local, state, and national level has planned and conducted many meaningful activities to motivate students in becoming prepared for careers in farming. Considerable progress has been made in developing contests and other activities which motivate the development of competencies needed in other careers in agriculture. The challenge remains, however, for the FFA to develop activities, contests, and other learning areas of agriculture education, e.g., forestry, agriculture mechanics, horticulture, agriculture processing, supplies and services, and others. Several suggested concepts for agricultural mechanics and horticulture follow:

Agricultural Mechanics

- Sponsor the following contests: welding, tractor trouble-shooting, tractor or machinery painting, tractor operation and safety, plumbing, farm machinery assembly, woodworking skills, and electrical skills

- Provide awards in: soil and water conservation, farm machinery service and maintenance, agricultural mechanics, and agricultural mechanics co-op placement

- Provide a co-op program with an area of agriculture

- Sponsor contests in: flower arrangement; fruit and vegetable judging; identification of fruits, vegetables, trees, terraces, and crop insects; and plant diseases; vegetable production contests (peppers, corn, cucumbers, tomatoes, beans, etc.); fruit production (small fruit and tree fruit); flower production; and greenhouse production

- Provide awards in: lawn improvement and co-op placement in horticulture

Summary

Local FFA chapters should:

1.plan, carry out, and evaluate those activities that will help local elementary and junior high teachers to motivate their students;
2. sponsor or co-sponsor a career education day;
3. develop and evaluate other activities that may help motivate students in all phases of the instructional program.

As the local chapter members select, plan, carry out, and evaluate those activities, they will develop competencies in leadership, citizenship, and cooperation. The involvement outlined in this article has significant potential for being made a standard part of every local FFA chapter’s program of activities.

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Environmental Laboratory — Means of Exploration in N. C.

by Dr. Ward R. Robinson

A laboratory including Occupational Clusters in Agribusiness and Natural Resources, Environmental Control, Marine Science, and Hospitality and Recreation is a preparation tool in a North Carolina High School Vocational Agriculture in North Carolina’s Junior High Schools.

Historical Development
The program of Occupational Exploration was implemented in North Carolina’s Public Schools in February of 1970. Implementation followed legislative enactment of a bill passed in June of 1969 which provided for funding experimental programs of Occupational Exploration for all boys and girls in grades 9-12 in 1970 and 14 schools in the state received funds for exploration based on their average daily membership for students enrolled in grades 9-12.

Program Organization and Objectives
Program organization includes instruction in the following activities: Environmental, Business and Office, Industrial, and Service. Each lab includes hands-on experiences in several of the 15 occupational clusters identified by the U.S. Office of Education. A fifth lab, an occupational information center, has an instructor and a materials library for exploration and career development in each lab plus facilities to provide students opportunities for self-appraisal and career planning.

Selection of Exploratory Experiences
Experiences and activities in all laboratories, including the Environmental Lab, are selected on the basis of the following criteria:

1. The activity stimulates the performance of a typical job task which allows students to see the relationship between activity and the job requirement.
2. The activity simulates the skills that may be developed in high school vocational offerings or at the post secondary level.
3. The activity provides occupational information which allows students to understand field and level skills (Career Ladder Concepts) concerning occupational clusters.
4. The activity provides an opportunity for students to appraise themselves in relation to job requirements and to plan for future educational opportunities.

Follow-up considers a variety of teaching methods and materials that provide students direction for the occupational implications drawn from experiences in which students have participated. After students participate in exploratory activities and analyze related occupational information materials they are expected to be able to:

- Identify several occupations in the Agribusiness and Natural Resources occupational cluster.
- Identify job characteristics of occupations explored including education or training required, skills and employment opportunities, advancement possibilities, location of job, fringe benefits, salaries, etc.
- Perform actual or simulated job tasks for typical occupations in this cluster.
- Describe whether the occupation is in demand or in surplus with the community.
- Identify high school and post high school training available for pursuing their occupational interest in this cluster.

Enrollment Trends and Program Acceptance
In 1972 there were 9,098 students enrolled in occupational exploration programs. Currently, 10,536 students are enrolled and anticipated enrollment by 1980 will reach 15,000.

Students have a magnetic attraction to this type of program. Since it is student-centered activity, data indicate a significant increase in average daily attendance for students who were previously attendance problems and lack motivation for school. Academically talented students are encouraged and expect the program to just as frequently as those who have records indicating low levels of achievement. Many schools enroll all students (boys and girls) who removes the stigma often associated with students who are assigned to programs because of low achievement. Parent complaints that their child was enrolled in an occupational program at the junior level has occurred rarely.

Teaching Personnel
Generally, neither experienced nor college graduates of Vocational Agriculture were available for employment. However, both new graduates and experienced teachers of Agricultural Education for high school programs and Vocational Agriculture were expected to perform the competencies needed for providing instruction in the Environmental Lab. Two years of observation indicate the new agricultural education graduate develops a program which is more in sync with the exploratory philosophy. The new graduate receives more information from instruction and instruction less frustration in adjusting themselves to a skill level (for this training was provided) to an activity level of the shortage of agricultural teacher science, and other majors who hold university degrees have been prepared through summer workshops to acquire the competencies needed to teach in the program. In the summer of 1970, teacher institutes with state department encouragement and assistance accepted a greater role for training teachers of environmental exploration.

Curriculum
Responsibility for curriculum development was delegated to personnel in each program we implemented. No uniform base curriculum for statewide distribution has been developed by the State Department. Currently a funded program has a special grant and is developing a base curriculum which will be field tested during the 1976-77 year.

"Exploring Occupations in the Natural Resources," a student resource guide for the middle school, developed under a Federal grant at Pennsylvania State University is a very useful publication for teachers providing instruction in the environmental lab.

Summary
The Occupational Exploration program implemented in North Carolina in 1970 is an elective offered to all boys and girls in grades 7-12. The purpose of the program is to provide experiences which are occupational in nature, represent typical job tasks, include concepts, and functions representative of the world of work and assist students in self-appraisal. The Environmental Laboratory which includes the Agribusiness and Natural Resources Occupational Cluster is a major component in the program. There is no base curriculum for distribution to teachers; therefore, each instructor designs a curriculum to fit student needs. The Occupational Exploration Staff of the

(Concluded on page 222)
Orienting for Career Exploration in Ag

Larry E. Miller
Teacher Education
TPF & SU

Teachers of Agricultural Education need to ask themselves this question as they attempt to help students select a career. Ginberg noted three phases as constituting a career choice continuum: a fantasy phase, a tentative phase and a realistic phase. Teachers should note that these do not begin and end at separate points in time, but rather are fluid and vary with each individual. Ask a six year old what they wish to be and they may say a cowboy, an astronaut, a doctor, a nurse, a fireman or a clown; and these would usually be considered to be fantasy choices. Sometimes during early or late adolescence the tentative phase begins to be entered. This begins at about the time that most students can elect a vocational course. Ginberg states that during the tentative phase students initially base their choices on interests; they worry about their place in society and then they begin to see their high school education ending and start to look forward to work or continuing their education. The realistic phase is characterised by (1) exploration, getting job and game experiences to pick an occupation; (2) crystallization, when compromises occur and the individual looks at factors and makes a commitment; (3) specification, occurs when the individual reviews the alternatives and chooses one of the phases are occupational in Vocational Education and Agricultural Education, and particularly so under the education concept. Can’t you see these stages surfacing in your students? Teachers need to ask themselves, “Where are they?” for each such class and for each individual. Students in a fantasy stage are seldom ready for a career commitment. The teacher must also realize that some people never get to the realistic stage.

Career Exploration

Career Exploration has gone far toward getting all of education involved in helping students explore careers. The divorces, exploration and orientation, and the preparation phases of Career Education closely parallel the previously cited career theory. At one point in our history a student could walk down Main Street, USA, and see numerous trades being used and people at work. This is no longer true as we have moved to an urban, commuting society. As with the crystallization of many social ill, the responsibility for helping the youth explore careers becomes a responsibility of the educational system. Pilot programs in Career Education have verified the efficacy of this approach. All schools have not instituted such a concept, however. Even though Vocational Education is one of the main strands in the Career Education system, not all of Vocational Education has set about meeting the responsibility incumbent to their students. Agricultural Education must do its part in this important endeavor. Teachers of Vocational Agriculture may need to get back to basics and stimuli have to be fed to both students and teachers to stimulate the faculty. The course content must provide for more than a book study of the current in agriculture. Students should get actual hands-on experiences in the field. These new experiences are important in preparing students for a living. Training on field trips and community resources must be identified, sequenced and utilized to their utmost advantage. The courses must be interesting, dynamic and inspiring students to teach in the future for this purpose.

Exploratory Agriculture

Exploratory Agriculture programs are needed by all schools to help provide students of the career opportunities in agriculture. Urban and rural students alike should have the opportunity to explore these careers.

The curriculum in Exploratory Agriculture should reflect the appropriate Career Education objectives and accept the students where they are in terms of their career decision maturity process.

INTRODUCTION

Each year a large number of vocational agriculture instructors enter new schools. Some of them are beginning their teaching career, while others are simply changing schools. Obviously, there are a large number of factors that one must consider when selecting a new school. Some of these are: salary, fringe benefits, facilities, location, budget allocations, teaching load, housing, shopping facilities, health and medical facilities—diversity of courses, and size.

Because of the possible importance and limitations of school size upon the success and effectiveness of a vocational agriculture instructor in a community, a further discussion will follow. For the purpose of this writing, a small school system will be thought of in terms of 200 students. In the large school system, there will be many more students and thus the school system will be thought of in terms of a school with 400 students.

ADVANTAGES OF A LARGE SCHOOL SYSTEM

There are the advantages of teaching in a large school system. The larger school allows the student usually have little or no extension work in agriculture and as a result, they have more free-time activities. With the larger school system, students have more choices that are available for them to use in their program. With the additional selections of students, there is a strong possibility that the overall quality of the students may be higher than in the smaller school system.

If teachers are expected to participate in extra-curricular activities, such as selling football tickets, sponsoring a chess club, driving school buses, sponsoring a class, and the like, it is usually with extra compensation. The daily schedule will tend to be more consistent and the teacher will be able to manage his own time more efficiently after the regular teaching day. It is generally easier to negotiate many items with the small school administration, however, administrators in the large schools seem to be more consistent with rules, regulations, and policies.

ADVANTAGES OF A SMALL SCHOOL SYSTEM

While there are many advantages of teaching in a school system, there is also many advantages of teaching in a small school system. Students may feel more at home in a small school system, however, they do represent the feelings of the authors and of many instructors with whom the authors have consulted.

Now, let us take a look at the advantages of teaching in a small school system. The instructor has a close contact with the members of the local community. He may very well know everyone in town; and everyone gets to know him in one way or another. This is certainly an advantage for the instructor in the larger degree of specialization that may be possible with the larger number of students. Many of the teachers in the larger school will have more than one instructor, allowing for various combinations of specialization within the classes. As the larger school, instructors may be more selective in their program admission procedures as students are required for the various courses. With the additional selections of students, there is a strong possibility that the overall quality of their students may be higher than

(Concluded on next page)
SHOULD I TEACH IN A LARGE ... SYSTEM?

through an agribusiness in the community. Most of the smaller communities depend directly on agriculture for their livelihood. If a good job is being done, this will probably happen. But if the need for the department more readily and will react more positively than a larger group. Even farm and home visits will be much easier because parents work on the farm or in the small communities. The farm and home visits are easier to make because people spend more time around and at home.

With everyone knowing the teacher in the community, he will be likely to be asked to participate in the various civic organizations, perhaps as an individual or through the Future Farmers of America. It will be the leader in the community. Normally, high attendance and active participation in regular day classes, FFA, and adult classes can be expected, if the instructor is willing to meet the challenges as they arise. The community is usually more eager to become involved in the program.

Although the teacher is usually more eager to become involved in the program.

SUMMARY

School size is a very important consideration in the selection of a site in which to teach. The school size is important because of the student-to-teacher ratio. There has been a lot of talk and much writing. What remains to be accomplished is sustained action and program change. This article focuses on a real-life example of career exploration at the junior high level in a small town, comprehensive high school.

BENEFITS

The original thought behind the program was to orient junior high students to certain careers they might take in high school. It was also to add variety in junior high. Previously, the students had been asked to study half or academic courses. The career exploration program gets the junior high students thinking about careers and gives them a personal interest in various occupations. From the vocational teachers' point of view, it might be seen as an effective recruiting and program expansion activity.

ORGANIZATION

The career exploration program, the department of Agriculture, Industrial Arts, Home Economics, and Counseling win-competition for high school students at the junior high school. Under the career exploration program, each department has separate programs in the 7 th and 8 th grades. After nine weeks in a department, the classes switch. Agriculture students during this period compete for the high school student council, including Vocational Agriculture. Anticipated growth of the program will be slower rate than had previously been expected.


AGRICULTURAL CONTENT

The career exploration is further described by using an example from the vocational agricultural curriculum. The seventh graders get more hands-on on exploration by trying out their skills in two areas of agricultural mechanics. In the eighth grade agriculture program, students are exposed to occupations that are available in agriculture in the community under the supervision of the instructor and are prepared to fill the present block of requirements. The most likely course to be added in this school would be Business Education.

APPROACH

The purpose of the program described is career exploration. It starts with exploring the kinds of coursework that the student might take in high school. Instructors then begin the occupational exploration. They begin with occupational directions on such things as the following: who and how to evaluate and understand the type of occupation that you'd like to go into, personal interests, importance of having a job, and when should you be thinking about it. They then look at audiovisual materials prepared to provide occupational information on specific occupations. The students then choose or find business in the community that are similar to those studied. They go as a group to the business. For example, if the class was going to the veterinary clinic, they go there. The veterinarian gives a short tour. The students ask for a brief job description and the kind of activities people do on the job. The students have a questionnaire with questions about job description, salary, benefits, whether they live at home, advantages and disadvantages of the job. The students are divided in advance by the class, so they discover what they need to know about choosing a job.

REQUIREMENTS

It seems important that the areas to be included in the career exploration program were based on advice from local civic advisory groups. The site of the principal was heavily involved, since extra scheduling effort was required in setting up the schedules for all cooperating teachers, that is, instructors of Vocational Agriculture, Industrial Arts, Home Economics and the students. Home Economics had to be coordinated for the career exploration effort. The success of such a program depends on the willingness of the faculty to cooperate. In this school, the guidance counselor in the junior high is easier to contact on the part of the school and contact group but obviously could not deal with all the jobs.
Leader in Agricultural Education: 

HAROLD MOORE BYRAM

By O. Donald Members

Harold Byram was teacher, administrator, author, and researcher. He served from 1906 to 1972 as professor of agricultural education at the University of Minnesota. He was author of the book, *Vocational Education and Practical Arts in the Community School*, published in 1929, and co-author with W. H. Wrench of the book, *Vocational Education and Practice Arts in the Community School*. He was a good, solid contributor to the development of agricultural education in the community school: evaluation of agricultural education as part of the local program of vocational education, leadership development, and team leadership for program planning and implementation.

One of his early publications was *Guidance in Agricultural Education*, published in 1929, and revised in 1966. This contributed both principles and practices for the teacher of vocational agriculture whose role was to assist teachers in providing guidance to the students in their classes. Dr. Byram served as a consultant to the Minnesota Teacher-Education Association; as a consultant to the Nebraska Teacher-Education Association; as a consultant to the University of Kansas Teacher-Education Association; and as a consultant to the University of Illinois Teacher-Education Association. His leadership for application of guidance and counseling in agricultural education came through his teaching and research. In addition to numerous articles, Dr. Byram prepared in 1946 a chart, *Occupations for the Agricultural-ly Trained*, which was revised into three charts titled, *Agricultural Occupations for Farm Youth*, which was sold and distributed nationally.

Harold Byram also voiced early concern for vocational agriculture programs which would prepare youth not only for farming but also other agricultural occupations off-the-farm. A quotation from an article written by Harold Byram and published in 1936 illustrates that concern which was pioneering 40 years ago:

> "The teacher of agriculture should accept the responsibility for guidance of farm boys in occupations for the agriculture-trained, one of his first duties."  

One of his colleagues, Harold Byram, also devoted much energy and time during his lifetime to promoting the importance of the quadrant of rural education of which he was a leader. His concern for the mid-1920s and early 1930s statewide and national projects on agricultural education and leadership led him to write this book, which was published in 1936. He was an active promoter of projects of the National Association of Home Economics, the National Education Association, the National Association of Teachers of Agriculture, and the National Council of Teachers of Agriculture.

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Don't Procrastinate... 
...Promulgate

Sam Stenzel
Assistant to the NVATA
Executive Secretary
Lincoln, Nebraska

The National Vocational Agriculture Teachers' Association (NVATA) has established close working relationships with many organizations in the agriculture industry. These activities resulted in award programs designed to recognize members who contributed significantly to vocational agriculture, teaching, and the NVATA. The impetus of the award programs is to recognize individual efforts and to emphasize the promotion and furtherance of objectives for vocational agriculture and education.

RECOGNITION AWARD PROGRAMS

Two outstanding award programs were implemented in 1968. Though the basic emphasis differs, they have similarities. One program encourages the young teacher to develop outstanding programs immediately and to become active in state and national professional organizations. The other encourages teachers to create a program which will develop awareness of the importance of agriculture and agriculture education. Both recognize state winners and award expense paid trips to the NVATA national convention.

OUTSTANDING YOUNG MEMBER AWARD PROGRAM

As a means of encouraging young teachers to remain in the profession and to encourage participation in the activities of the NVATA, Outstanding Young Member awards are sponsored by the United States Steel Corporation, Pittsburgh, Pennsylvania. This award is designed to encourage young teachers to become more involved in activities that indicate tenure. The award recognizes those who have taught one to three years and have assumed an active role in professional leadership, have been active in community activities, and have implemented innovations to meet the immediate needs of the local vocational agriculture students.

The Outstanding Young Member award program has been a popular contest. In 1973 a total of 114 entries were received from 37 states. One state reported 13 entries.

The Regional winners of the Outstanding Young Member awards in 1973 were Victor Boboławska, Idaho; John Collins, Jr., Midway, Tennessee; Buster High, Verington, Nevada; Mark Pearson, Poca City, Oklahoma; Roger Shlayton, Naylor, Missouri; and George Wheeler, Canaan, Connecticut.

The winners of the Agriculture Career Exploration awards were R. R. Earle, McHenry, South Carolina; Bob Hamblett, Fort Collins, Colorado; Brian Inglis, Forest Lake, Minnesota; Glen McKeever, Romeoville, West Virginia; Odel Miller, Raymond, Ohio; and Joe Navesink, Hillsdale, Wisconsin.

The award recipients attended the 22nd annual NVATA national convention in Anaheim, California, December 5-10, 1975.

AGRICULTURE CAREER EXPLORATION AWARD PROGRAM

The Agriculture Career Exploration award program was conducted jointly by the NVATA and Snyper New Holland, New Holland, Pennsylvania. It recognizes vocational agriculture teachers who have designed and implemented a course of study emphasizing educational and agricultural opportunities. The winners were those who have developed exemplary programs and have been selected by completing the application form.

TABLE I: State Associations that have Regional "Outstanding Young Member" and "Agriculture Career Exploration" Award Winners

<table>
<thead>
<tr>
<th>Number of</th>
<th>Number of</th>
<th>Names of States With Winners</th>
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<tr>
<td>Winners</td>
<td>States</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>13</td>
<td>Alabama, Arkansas, Colorado,</td>
</tr>
<tr>
<td>3</td>
<td>8</td>
<td>Florida, Idaho, Louisiana, Maryland, Minnesota, New York, South Dakota, Texas, Utah, Vermont.</td>
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<tr>
<td>4</td>
<td>6</td>
<td>Nebraska, Ohio, Wisconsin,</td>
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<tr>
<td>5</td>
<td>5</td>
<td>Iowa, Minnesota, North Dakota,</td>
</tr>
<tr>
<td>6</td>
<td>4</td>
<td>Colorado, Ohio, Missouri.</td>
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TABLE II: State Associations that have Regional "Outstanding Young Member" Award Winners

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<th>Number of</th>
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<th>Names of States With Winners</th>
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<tr>
<td>Winners</td>
<td>States</td>
<td></td>
</tr>
<tr>
<td>1</td>
<td>14</td>
<td>Alabama, Arkansas, Colorado,</td>
</tr>
<tr>
<td>3</td>
<td>5</td>
<td>Florida, Missouri, Nebraska,</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Ohio, Pennsylvania.</td>
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TABLE III: State Associations that have Regional "Agriculture Career Exploration" Award Winners

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<tr>
<th>Number of</th>
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<tbody>
<tr>
<td>Winners</td>
<td>States</td>
<td></td>
</tr>
<tr>
<td>2</td>
<td>11</td>
<td>Louisiana, New York, South Carolina, Virginia, West Virginia, Wyoming.</td>
</tr>
<tr>
<td>3</td>
<td>4</td>
<td>Iowa, Minnesota, Ohio.</td>
</tr>
<tr>
<td>4</td>
<td>3</td>
<td>Colorado and North Dakota.</td>
</tr>
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</table>

TIME FOR ACTION

Aggressive teachers have discovered that vocational education in agriculture provides unprecedented opportunities to develop and implement programs which motivate students. Every state has outstanding teachers who have designed and implemented a course of study emphasizing educational and agricultural opportunities. The winners were those who have developed exemplary programs and have been selected by completing the application form.

Each state can have an unlimited number of entries, but each region will have only one winner. Every teacher with a successful program is encouraged to apply for the regional competition. Your application could identify the program which will qualify for that state selected award.
Agricultural Careers -- Oklahoma Style

James P. Key
Teacher Education
Oklahoma State University

At the August teachers' conference, each vocational agriculture teach in Oklahoma received a copy of the Agricultural Careers curriculum developed by the Agricultural Education Department at Oklahoma State University through cooperative funding from the State Department of Vocational and Technical Education and the Agricultural Experimental Station at Oklahoma State University. Following the advice of advisory groups made up of vocational agriculture teachers, State Department personnel, and university personnel, curriculum units based on procedures which have been approved by selected school principals, state, and lower levels, are being developed. After development, they were tested in selected ninth grade classes of vocational agriculture departments across the state and found to be effective. The curriculum was also found to be equally effective with different socio-economic groups and with disadvantaged students. A research study is underway now to measure attitude toward work and agricultural occupations. Following development of the instrument, a study will be conducted to see if the curriculum changes students' attitudes toward work and agricultural occupations.

The Curriculum

Development of the Oklahoma curriculum developed theory that students in junior high and high school are exploring occupations, the agricultural careers curriculum includes a section to orient the student to his own abilities and characteristics, to agricultural occupations, and to the decision-making process used in choosing occupations. In this first unit, self-disclosure was designed to orient students to their own characteristics such as interests, personality, skills, and experience in relation to occupations. It uses an interest inventory, personality scale, autobiography, and other activities to aid the student with his look at himself.

The next two units were constructed to acquaint the students with agriculture as an instructional area and the major clusters of occupations in agriculture. They include an introduction to the major USOE instructional areas and the seven agricultural occupations clusters. A listing of specific occupations from the Dictionary of Occupational Titles is provided along with ways to enter and education needed for them. Assigned activities help students determine demand for the occupations.

The specific agricultural units attempt to help students look at individual agricultural occupations in more detail. The units help the student look at duties and responsibilities of this occupation as well as benefits, working conditions, and steps which could be taken to enter the occupation. Video tapes of workers in each occupation bring the students face to face with the actual situations and conditions and allow them to view hours of a worker in that occupation. In addition, it or in replacement of the video tapes, the teacher could arrange field trips, resource persons, or a series of some of the skills of the occupation. Occupations in each occupational cluster were chosen based on demand, experts' opinions, and availability. Specific occupations can be added or deleted from the program as local and state conditions dictate.

The last two units, Decision Making and "Pay Day," help students in making tentative decisions about occupations and then go through the decision-making steps through assignment sheets and the simulation game. Students first choose three occupations and gather information about them in order to compare them. After tentative choice of one occupation, they get to see how the education, experience, and chance factors combine to help them progress in their chosen occupation. The "Pay Day" game is patterned somewhat after "Monopoly" but uses education, experience, economics, and chance to progress the student in different levels in his chosen occupation.

Video Tape Development

A video tape was made of a person employed in each of the specific agricultural occupations chosen. The following were discussed with the individual while he demonstrated some of the duties performed in the occupation and the working conditions:
1. What are the tasks performed in this occupation?
2. What are some of the special tools used in this occupation?
3. What kind of training do you receive training for this career?
4. What is a method which a high school vocational agriculture student could use to gain entry into this occupation?
5. What are some personal traits that are desirable for a person in this occupation to have?
6. What is the cause of the earnings wage or salary a person could expect in this business or occupation?
7. How did you attain your position?

These video tapes ranged from 15 to 30 minutes in length and were shown uneedited to the students as they were filmed at the occupational location. The decision to do this was based on the students' interest and the kinds of things involved in agricultural occupations and the kinds of careers for which they might prepare.

CONTINUED

The Vocational Agriculture Interest Inventory (available from the U.S. Bureau of Labor and Statistics) is used with the Self-Discovery unit to aid students in determining their interests in agricultural occupations. This is the only item which must be ordered from an external source.

The Agricultural Careers curriculum is available from the Curriculum and Materials Center of the Oklahoma State Department of Vocational and Technical Education, 1515 West Sixth Street, Stillwater, Ok 74074. The price is $10.00 for the curriculum and $6.00 for the Handbook of Agricultural Occupations. There is a 25 percent discount for ordering 50 or more. The video tapes will be available to each state and then can be copied at any school.

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Henderson, Billie Hugh. "Development, Im-
plementation, and Evaluation of a Career Development Curi-
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NEW SPECIAL EDITOR FOR PENNSYLVANIA, NEW JERSEY, DELAWARE, MARYLAND, AND WEST VIRGINIA

James H. Morenson is Assistant Professor of Agricultural Education at The Pennsylvania State University. His responsibilities include teaching undergraduate and graduate methodology courses, supervising student teachers, and coordinating the College of Agriculture internship program. He is also in charge of the General Agricultural major curriculum and advises the chapter of Alpha Tau Alpha.

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CONTINUED

AG CAREERS

complete with commercial television guidance, are those that are representative of the actual conditions under which both employers and employees alike are very cooperative and willingly sign releases for these tapes to be used for educational purposes.

Additional video tapes have been developed for the stock herdsmen, artificial insemination technician, pest control specialist, welder, small engine repairman, part-time, agricultural construction worker, greenhouse worker, woodworker, woolspinning and wool grading, and agricultural bank representative. Slide tapes are being developed for each of the specific occupations in addition to the video tapes.

Supplementary Materials

A Handbook of Agricultural Occupations was developed including all the agricultural occupations in the Dictionary of Occupational Titles (DOT). The 49 occupations listed were grouped into the seven agricultural occupations clusters by Dictionary of Occupational Titles numbers for easy reference. The Handbook is used by the students to search out occupations that they would like to get more information on them in conjunction with the occupational units.

The Oklahoma Training Information System current report is used along with several of the units to help determine demand for agricultural occupations. The report is to be available to local businesses, state employment agencies and other sources to determine local and state demand.

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CONTINUED

VOCATIONAL TEACHERS TEAM UP...

seventh or eighth graders at once. Should one department drop out of the rotation, the students would likely end up in tiny huddles, where they were when the program began.

REACTION

Student and teacher reaction to this type of career exploration program has been uniformly satisfying after five months of operation. They feel the program is successful because it uses local resources, is flexible and provides hands-on experiences in selected areas.

SUMMARY

The program requires cooperation among vocational and non-vocational teachers and school administration. It also requires some creative foresight in implementing the concepts of career education in a practical setting.

Agricultural Education career exploration programs in cooperation with other vocational teachers as well as general education teachers can offer a little segment of, "try it and see if you like," and "hand-on" in a variety of career fields. Junior high students can choose the kinds of things involved in vocational education and the kinds of careers for which they might prepare.
STORIES IN PICTURES

REALISTIC EXPLOSIVE ACTIVITIES — Pupils enrolled in an exploratory agriculture class at R. E. Ayrer Junior High School (Simpson City, Virginia) are shown participating in realistic activities. In the photo on the left, Larry Powell, exploratory agriculture teacher at the school, is instructing the spreading of pipe. The photo on the right shows Wayne McKallister, also an exploratory agriculture teacher at the school, explaining a display of tools to a nursery and garden supplies store. (Photo by Robert Yeith and courtesy Larry Miller, Virginia Polytechnic Institute and State University)

DEMONSTRATING ENGINE ADJUSTMENT — Students at Cooper Roots ROCES (New York) are shown observing the adjustment of a lawn mower engine by their teacher, James Ellis. (Photo courtesy Richard Jones and Arthur Beeley, Cornell University)

PRINCIPLES OF ENGINE OPERATION — Tom Giles, agricultural practicals instructor at Schenectady Vo-Tech (New York) ROCES, is shown explaining the operation of a four-cylinder engine to pupils enrolled in Agriculture I Class. (Photo from Richard Jones and Arthur Beeley, Cornell University)

ON THE JOB SUPERVISION — Jeff Bello, agriculture student at Opelika, Alabama, is shown checking mules back under the supervision of his agriculture instructor, Joe Pearson. Jeff is placed by Hall–Groat–Greene, Inc., in Opelika. (Photo by Frank H. Eilts, Alabama Department of Education)

MEDIA IN AGRICULTURAL EDUCATION — Mississippi State University postgraduate students view materials received for a federal project on Career Preparation in Agriculture. Project staff include (left to right), David L. Edmondson, graduate assistant; and John O. Hauk, Extension Farmer. (Photo by J. R. Hamilton, Mississippi State University)