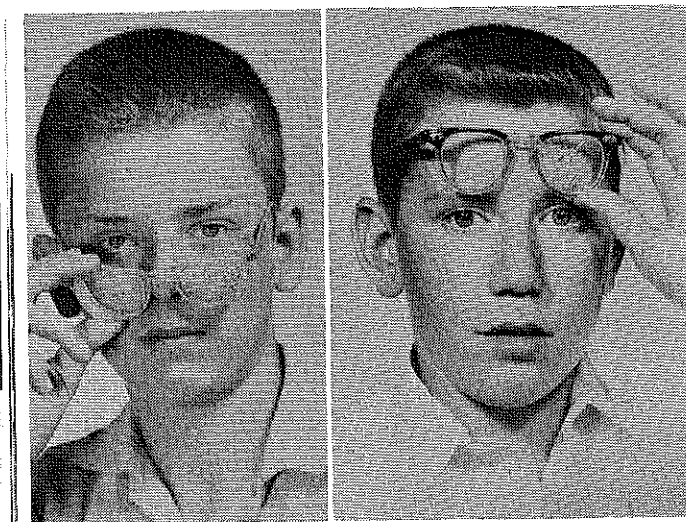




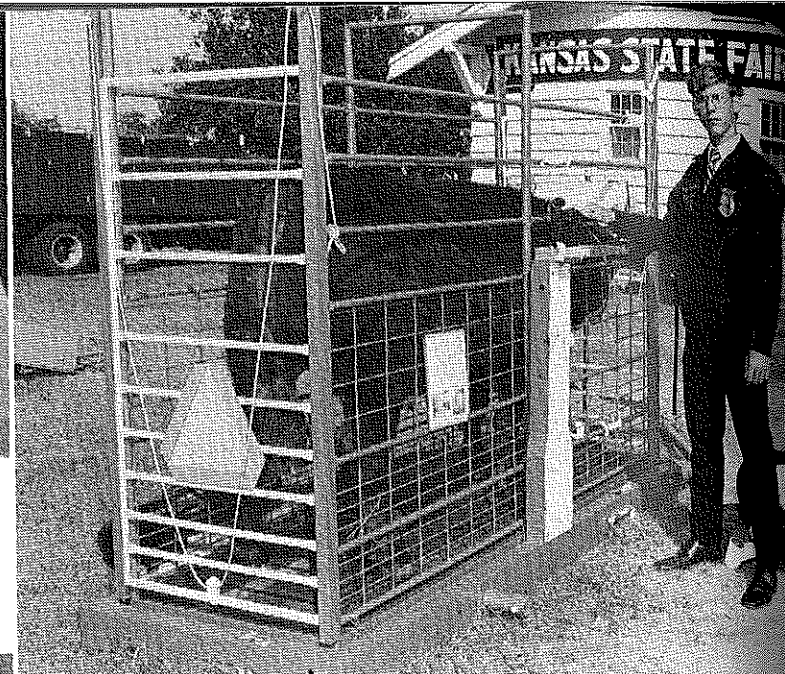
ALPHA TAU ALPHA initiated three National Honorary Members at the 1972 Conclave. Left to right DON McDOWELL, member, National Advisory Council on Vocational Education, Madison, Wisconsin; SAM STENZEL, Assistant Executive Secretary, NVATA, Lincoln, Nebraska and HOWARD TEAL, President NVATA, Boonville, New York. (Photo by Richard Douglass).



TEACHER SHORTAGE—The NVATA played a part in the 1972 Agricultural Career Show. It got the attention of David Geter (left) from the Greenville, Georgia Chapter and Tim Lewis (center) from the Perry, Georgia Chapter. Carl Vinson had a good chance to expose them to the opportunities to teach Vocational Agriculture in 1975. Carl is a Student Teacher from Columbia, Missouri. (Photo by Richard Douglass).



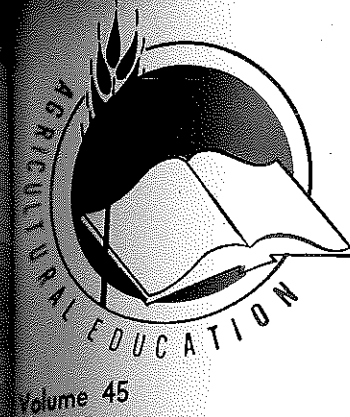
JUNIOR WISE OWLS: Charter members of the Junior Wise Owl Club of America are Robert K. Chapin (L.) of Mahwah, N.J., and Edward L. Sinclair of Greenwich, Conn. Both 13-year-olds saved their eyes with protective eyewear. (Photo supplied by James E. O'Neil, National Society for the Prevention of Blindness).



This Grand Champion Farm Mechanics Project won Guy Ernsting a \$500 scholarship from Hesston Manufacturing Company. Guy made the scales from scratch except for the weight beam that he obtained from an old scale. Ernsting also first place in the Chapter competition. (Photo supplied by Howard W. Vo-Ag Instructor, Ellinwood, Kansas).



WYOMING VOCATIONAL AGRICULTURE TEACHERS SAY THANKS TO TEACHER TRAINER. Some 200 former trainees of JACK RUCH, Head Agricultural Education at the University of Wyoming joined in a "Jack Ruch This is your Life" Program at their annual conference in Cody. The presentation of a new Dodge pickup was made possible by his former students and friends across the United States. (Photo supplied by James Durkee, University of Wyoming).



Volume 45

Agricultural Education

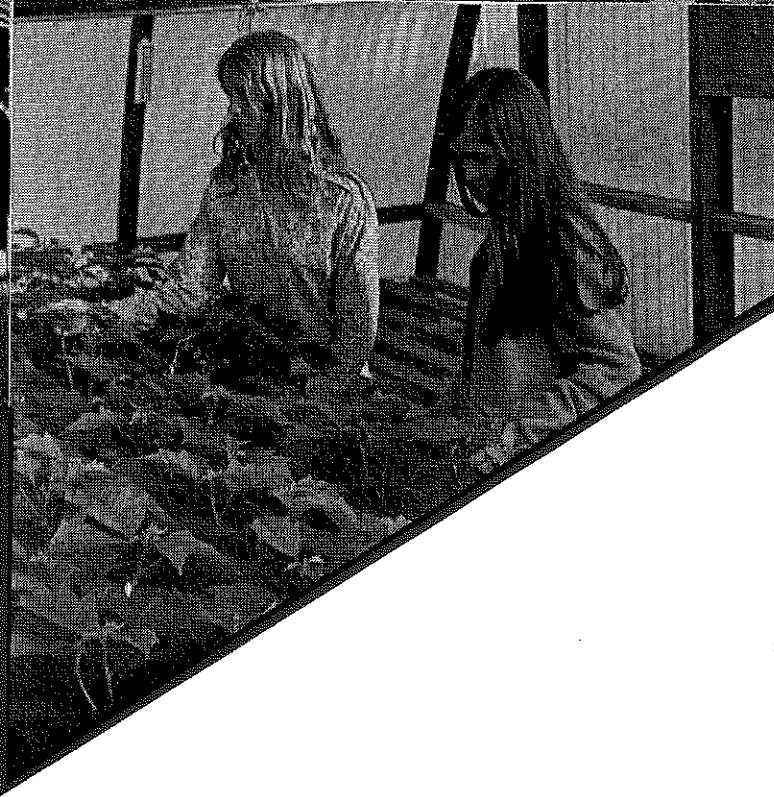
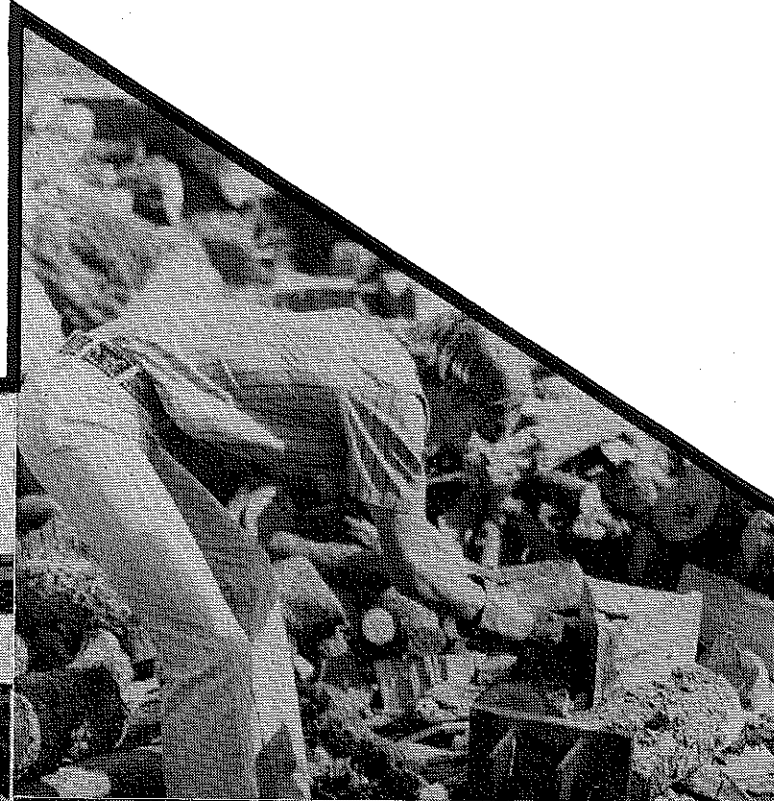
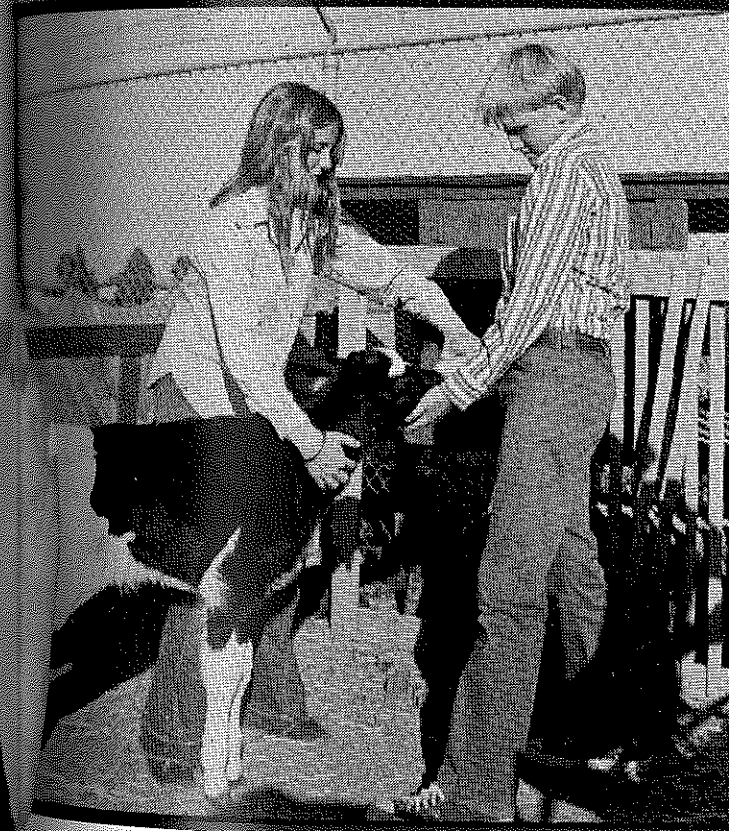
February, 1973

Number 8

Exploring Agricultural Occupations

Stories in Pictures

by Richard Douglass



Theme—
**CAREER EDUCATION:
JUNIOR HIGH PROGRAMS**



The
**Agricultural
Education**
Magazine

EDPRESS Vol. 45 February, 1973 No. 8

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This publication is the monthly professional journal of agricultural education. The journal is published by THE AGRICULTURAL EDUCATION MAGAZINE, INC., and is printed at the Lawhead Press, Inc., 900 East State Street, Athens, Ohio 45701.

SUBSCRIPTION PRICE: \$3 per year. Foreign subscriptions \$4. Student subscriptions in groups (one address), \$1 for October-May. Single copies and back issues 50 cents. In submitting subscriptions, designate **new** or **renewal** and address including ZIP code. Send all subscriptions and requests for back issues to Harlan E. Ridenour, Business Manager, AGRICULTURAL EDUCATION MAGAZINE, Box 3843, Columbus, Ohio 43214.

Second-class postage paid at Athens, Ohio.

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

COVER PHOTO

Arizona's Junior High Agricultural Exploratory Programs Point to the Career Education Concept.

LEFT — Dinnertime — Calf feeding is being carried out by Stacy Penrod and Frank Johnson, Carson Junior High School students, Mesa, Arizona. BOTTOM — They Sure Look Good! — Poinsettia plants being grown for Christmas are being checked by Stacy Penrod and Stacy Leonard, Carson Junior High School students, Mesa, Arizona. TOP — FFA Money making Activity (Cord wood) — Kino Junior High School student operating hydraulic wood splitter construction in the Senior High Vo-Ag Shop. (Photos supplied by Carlos H. Moore, State Supervisor Agricultural Education, Phoenix, Arizona).



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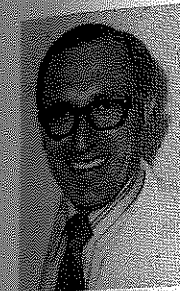
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Editorials

Guest Editorial . . .

**Junior-Highers Explore Agribusiness
and
Natural Resource Programs**



Roland L. Peterson
Teacher Education
University of Minnesota

R. L. Peterson



Odell Barduson
Vocational Agriculture Supervisor
Minnesota Department of Education

Odell Barduson

What should we teach ninth grade students in an agriculture course? Are courses in Animal Science, Crops and Soil Science, Carpentry or Welding still appropriate? Are we providing learning experiences for an increasing number of students, or is enrollment declining? What about career education? How might a career education course be implemented for the junior-high ninth grade students? About three years ago, these questions became the concern of fifteen Minnesota vocational agriculture teachers, state department of education supervisors and teacher educators. Enrollment in agriculture classes was in a static condition and it was felt that more students should be at least given an orientation in the world of agriculture and natural resources. Consequently this group initiated the development of a career oriented course of study for ninth grade students. In the early stages of discussion it was relatively easy to make philosophical statements about career education. However, considerable imagination and determination were needed to implement a meaningful career-oriented education course of instruction. With financial support from the state department of education, a course of study was published and circulated to all the schools in the state designed to orient students to the subject matter and wide spectrum of job opportunities in the agriculture and natural resources industries.

The Course

In the process of developing the course of study the following concepts provided the framework. First of all it must be student oriented, it must be exploratory in nature with a blend of agricultural and natural resources subject

1. It is student oriented by providing experiences for students to understand themselves.
2. It is career oriented.
3. It attempts to explore the entire agriculture industry.
4. It ties together career exploration and technical subject matter content concurrently.

matter, it must include an opportunity for a supervised occupational experience program for each student and integrate the F.F.A. activities within the course.

You may ask "Why is this course any different than what has been a traditional vocational agriculture course for ninth grade students?" The chief differences are probably in the following areas. First, the course attempts to have the students do a self-analysis of their own situation. Generally teachers spend a week helping students become familiar with their interests in agriculture and natural resources, their goals and abilities to pursue further courses of study. The next few weeks are spent orienting students to the F.F.A. and the types of supervised experience programs they must become involved with as they participate in the course. This aspect is not particularly different from a traditional course for beginning students except for the opportunity to have an exploratory supervised experience program. In this type of supervised experience program students are required to interview agribusiness and natural resource employees. In the remaining thirty weeks of the year, both the nature of the occupations in each cluster and the basic technical subject matter problems associated with each cluster are discussed for each of the eight occupational clusters. Approximately four weeks may be devoted to each cluster, however, this varies greatly with each community and the resources available to each teacher. The eight areas are Agricultural Mechanics Occupations, Agricultural Production Occupations, Agricultural Supplies and Service Occupations, Agricultural Products Occupations, Agricultural Horticulture Occupations, Agriculture Natural Resource Occupations, Agricultural Forestry Occupations and Other Agricultural Occupations such as the professional occupations. The following suggested example, in the Horticulture cluster provides an overview of what is discussed in each occupational cluster.

- "What is horticulture?"
- "What is the function of horticulture?"
- "What are the businesses of horticulture?"
- "What are the jobs in the field of horticulture?"

(Continued on next page)

The framework provides a student oriented, exploratory program where participants observe and discuss agricultural occupations.

(Continued from page 171)

At this point the teacher may pursue a number of problems that deal with the basic subject matter students should possess in the area of horticulture. The following list of example problem areas, again in the horticulture cluster, may serve to indicate what technical subject matter areas are discussed in each cluster:

- | | |
|--------------------------------------|---|
| Landscape Design" | "Tree and Shrub Care" |
| "Landscape Structures" | "Flower Care" |
| "Tree and Shrub Identification" | "Operating and Maintaining Horticultural Equipment" |
| "Grass and Flower Identification" | "Flower Arranging" |
| "Lawn and Turf Care" | "Nursery Operation" |
| "Establishing and Maintaining Lawns" | "Greenhouse Management" |

To provide meaningful experiences for students a variety of learning activities which provide real experiences are encouraged. Activities such as field trips to sod farms, nursery's greenhouses, florist shops, an arboretum, a fully landscaped home and a lawn and garden center; having students make flower arrangements and displays; watching pruning demonstrations; and also having resource persons from horticulture businesses visit the classroom are learning activities that provide practical ways of making the technical subject matter live and reveals, to some extent, what people do in those jobs.

In the supervised experience program phase, each student will personally interview one or two persons employed in a horticultural type job. They will also perform a number of supplementary skills involved in this cluster and finally they will plan one or two home improvement projects which all tend to compliment the career exploration concept. With this emphasis repeated for each of the eight clusters, students do have an opportunity to gain a wide range of

Subscription Price To Increase June 1, 1973

At its annual meeting in December, 1972, the Editing-Managing Board voted an increase in the subscription price of the *Agricultural Education Magazine*. Effective with all new subscriptions June 1, 1973, and renewals after June 1, 1973, the domestic rate will be \$5.00 per year. Foreign subscriptions will be \$6.00 per year, and student subscriptions in groups will be \$2.00 for October-May.

The *Agricultural Education Magazine* has been fortunate over the forty-four years since 1929, to have had only one other rate increase. The philosophy has been to produce the journal at cost. Good management procedures have made it possible to publish our journal with no advertising, and therefore produce a more efficient professional improvement tool. Increasing publishing costs, however, have brought about an average annual deficit of nearly \$2000 during the past three years.

career experiences. Four unique features have been followed in developing this course.

The Results

This course is currently in its third year of development. The results have been most encouraging. First of all, nearly half the vocational agriculture departments in the State are using the course. Secondly, school administrators have expressed real enthusiasm for the course. With this added incentive, enrollments in ninth grade programs in many schools have zoomed from 10-20 to 30-40 students. Since the course is in its second and third year of development in some schools, increased enrollments are beginning to appear in senior high school agriculture courses. In those schools a third observation reveals that courses in the senior high program are being added, and as a result it appears more students will be prepared in agribusiness and natural resource areas. Yes, a ninth grade career exploration course is "alive and doing very well" in Minnesota. Dr. A. M. Field, student-oriented philosophy is still coming through which he so frequently stated "Lets take students from where he or she is to where they want to be." ◆◆◆

Themes For Future Issues

- May — Career Education: Supervised Agricultural Experience Programs
- June — Career Education: The School's Responsibility For Placement and Followup
- July — Career Education: Unique Instructional Programs and Materials
- August — Career Education: For More Effective Teacher Education and Supervision
- September — Career Education: Articulation Among Local, Area and State Programs
- October — Career Education: Upgrading Adults
- November — NVATA Silver Anniversary Issue
- December — Career Education: Accountability In Evaluation

At present, slightly more than 9000 agricultural educators are receiving the *Agricultural Education Magazine* up about 5 per cent from the same month in 1972. If you are not a regular subscriber, or know others who are not subscribers, why not mail your check to the Business Manager before June 1? Address your envelope to: Harlan Ridenour, Business Manager, *Agricultural Education Magazine*, Box 3843, Columbus, Ohio 43214.

Have you considered including the **AGRICULTURAL EDUCATION MAGAZINE** Subscription as a part of your departmental periodical requisition each spring?

VOCATIONAL EDUCATION IN THE JUNIOR HIGH SCHOOL

Ralph Moodie
Agriculture Occupations Instructor
Wethersfield High School
Kewanee, Illinois



Ralph Moodie

The need to extend vocational education into the junior high (grades 7-8) has been overlooked by many people for a long period of time. There is a need for a complete vocational experience program and an awareness of the world of work. The students are eager to learn and they want to know more about this subject matter that is usually completely overlooked in the lower elementary grades.

The need for a complete program resulted from 8th grade students knowing very little about vocational subjects when it came time to register for their high school classes. The students did not understand the vocational classes so they signed up for foreign languages, college prep classes and other courses that many students do not need. The only reason for this was because they didn't know what Vocational Agriculture, Industrial Arts, or any of these other vocational programs had to offer.

This year at Wethersfield School District #230, we introduced a new vocational program in the junior high. These are Vocational Agriculture, Industrial Arts, Home Economics, and the Business Classes. The way that we include both 7th and 8th grades in one period per day 5 days a week, is that the 7th grade meets on Tuesday and Thursday, and the 8th grade meets on Monday, Wednesday and Friday. Each class has about 100 students, and we divide these students into four

Junior High students are eager to learn, especially if the agricultural subject matter has been overlooked in the lower elementary grades.

groups with boys and girls mixed evenly. With four groups and four vocational subjects to be covered, we rotate the students each 9 week grading period to a new vocational area. With this type of program you only meet the 8th grade 27 times per class and the 7th grade 18 times per class. This gives you a good chance to acquaint the students with your program and it just gives the students a taste of each major area covered in that vocational subject.

In Agriculture, I have broken the subject matter down into the following major areas:

1. What is Agriculture?
2. Tour of Ag shop and class.
3. Tour of Lab. Farm.
4. Horticulture.
5. Livestock Industries.
6. Soil Science.
7. Plant Science.
8. Conservation.
9. Mechanics.
10. Fertilizer and Feed Industry.
11. Horse Science.
12. The FFA and what it offers.

This way the students get a good cross section of what is included in high school Ag courses. The 7th grade course material is introductory information, and we only spend one day on each area listed above. When students move to the 8th grade, I use the same material but with more depth and as many field trips as possible. This gives the student a chance to see what each

vocational area is really about and how it can be applied in the world of work. It also lets the program build so the students have something to look forward to when they enter the 8th grade.

The course is set up on a non-graded basis, and the students receive only a "Cr" grade for credit. This way you can meet the student in a new light because he doesn't have the "grade" to worry about. The last day of each 9 week period, I use an evaluation sheet to find out which parts of the program are the most productive and which parts might need changing.

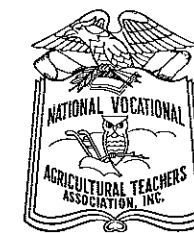
The other three vocational subjects use about the same format that I have described and we have all submitted lesson plans so we avoid duplication. All four of us have the same major educational objectives in mind which are three-fold;

- to acquaint the student with that vocational subject.
- to give an awareness in Career exploration.
- to relate the world of work.

The results of this program are yet to be observed as the completion will be reached when the students enroll in high school and start their individual vocational programs.

We have two future objectives in our vocational program, one is a health occupation and career program in the high school, and the other is a K-6 career orientation in the lower elementary grades. This way we would complete all 5 major vocational areas in the high school and have a complete K-12 vocational orientation, exploration and preparation programs available to the students. ◆◆◆

OPENING DOORS TO CAREERS
VOCATIONAL EDUCATION
WEEK
FEBRUARY 11-17



CAREER EDUCATION: TURN STUDENTS ON IN THE MIDDLE SCHOOL AND JUNIOR HIGH



Willie Adams

Middle and/or junior high schools have an important set of functions to perform in promoting career development of students. Matheny,¹ the author of numerous books, monographs, and articles on career development, and who is currently conducting research in peer modeling, the application of behavioral modification to classroom practices, and the effects of human relations training upon prison personnel, lists five such functions that should be executed with the 6-9th graders. In order to carry out a successful career education program of an exploratory nature, it is paramount to make sure that these functions are facilitated. These functions if properly consummated will "turn on" any student in this age group. Each of these functions is examined and recommendations for their performance are included in the following discussion.

Recommended Functions

- 1—A continuation of occupational orientation started in the elementary grades should be emphasized. Repetition helps emphasize the importance of job awareness. The middle school and/or junior high students are a little older and more serious at this stage of their educational preparation. Parents are more concerned about the occupational choice that these "kids" make. Therefore, it is a good time to really turn these students on.
- 2—Provide opportunities for the development of accurate self-concept. Educators realize the vast mistakes a student makes when he perceives himself as somebody else. These mistakes can be avoided if, and only if, one makes the proper analysis of what he really is and aspires to be. Such analysis includes his attitude, interests, and aspirations. After an accurate appraisal is made of one's

Career education or education for careers? It matters not — our job is to turn them on and let them shine.

- self, motivation is in order. This function is very necessary for the educationally disadvantaged child, for many students in this category have been told that they are unworthy, invaluable, and will never amount to anything. Teachers need to help correct this accusation. The considerate teacher can be a "switch flipper" of the noiseless type that would turn any student on in this age group without his classmates knowing it until he sees the result of motivation. The teacher can do this switch flipping by praises, a note of encouragement on his paper, a pat on the back, or a helping hand at the needed time.
- 3—Offer supervised practices in decision making. It is realized that at this stage of one's development, decisions made are of short duration and flexible. It is good to practice making decisions early even if they are changed each year. After all, this is only the result of exploration. A sound occupational commitment cannot be made until the student has gained knowledge by trying out many tasks or jobs to test his likes and dislikes. A student must find out if he or she is interested in the many jobs that he has read about, been told about by the teacher, that resource persons have answered questions concerning, and that have been shown on TV, slides, video tape, or on field trips. Interest serves as a vehicle to motivate students to become involved in worthwhile learning experiences. Finding out what really motivates a student and using this vehicle is an excellent way to keep the educationally disadvantaged in the mainstream of our educational process.
 - 4—Provide vocational information and exploratory experiences. This may well be done by following one of

Willie Adams
Graduate Assistant and Doctoral Candidate
Agricultural Education
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the examples already under way in programs in states committed to career education. The exploratory system for junior high years, as submitted by Gambino² for the New Jersey schools, is only one example of providing both information and exploratory experiences. In this system, Career Clubs are organized for the 7th, 8th, and 9th grades. These are not hobby clubs. Students go on mini trips taking cameras, audio tapes, and video recorders that they are allowed to operate. They setup and operate businesses and conduct surveys; they also publish their own newsletters. They have summer programs that work well for the disadvantaged middle school age girls and boys. These boys and girls are eligible for numerous part-time jobs in parks, homes, farms, and schools. Their introduction to vocations (I.V.) emphasizes the development of occupational awareness in students at the junior high level. These exploratory, manipulative, classroom, shop, and laboratory experiences are offered in a wide range of occupational areas, according to Gambino.² The exploratory program for junior high years has in it an Intensive Skill Training unit designed to develop for some students a salable skill or skills that will benefit those who plan to or must leave school for a short period of time to work after completing the eighth grade in order to help support the family. Counselors and teachers cooperatively identify such students and help them determine the areas they want to explore and follow-up with training for a specific entry level job. The concept of career education also provides for reentry at any level and at any age that these students want to return. The on-the-job experiences they will have had, if they were positive, no doubt will turn them on.

- 5—Assist students in choosing appropriate

(Concluded on page 177)

OCCUPATIONAL ORIENTATION IN AGRICULTURAL CAREERS—A Must For Career Planning In 7th & 8th Grades

Philip B. Fredenburg
Teacher of Agriculture
Indian River Central School
Philadelphia, New York



P. B. Fredenburg

With the growing trend for comprehensive career orientation, the curriculum in agricultural education is challenged to meet the need for offering occupational orientation in careers in agriculture. As a part of this career orientation, students in the seventh and eighth grade have a right to gather information about the career possibilities in the field of agriculture. Each student should be introduced to agricultural careers in an organized manner before he or she makes the decision to explore specific job skills.

If the concept of career education is to work, "it must encompass the entire school program from kindergarden through secondary school completion."¹ The U.S.O.E. has encouraged change in both vocational technical education and in the academic subjects to meet the needs of comprehensive career education. The staff of the U.S.O.E. "see the career education concept as a natural development in the transition in agricultural education prompted by implementation of the Vocational Education Acts of 1963 and 1968."²

Many educators propose new programs and request more time for students in their subject area. We recognize that equal time must be given to areas such as home economics, trade and industrial, and the other fields of career orientation if we expect to have all students taking occupational orientation in agriculture. "What we are doing is applying a wholly new concept to the entire system; change, therefore, will be substantial."³ This means that occupational orientation in agriculture will be a short course with its thrust devoted to orientation of students within the seven areas of agricultural occupations defined by the U.S.O.E., rather than exploration of specific job skills. This exploration would normally follow in the ninth and

tenth year after the student has selected an area for occupational exploration.

At present the information presented to seventh and eighth grade students, about agricultural career opportunities is available only to those students enrolled in classes in agriculture. The present programs are normally designed to articulate with existing programs in ninth and tenth grade agriculture and are not designed for any students other than those who have indicated a desire to pursue an agricultural course in high school. All students have the right to either select or not select training in the field of agriculture based upon facts, not rumors of the content of the course or type of jobs available.

A recent survey of teachers of agriculture in New York State engaged in teaching courses in seventh and/or eighth grade agriculture, indicates two things: (1) there exists a lack of understanding as to the content of a course in occupational orientation and (2) confusion as to what population this course would serve.⁴ We as agricultural educators have a need for workshops and more preparation in the area of presenting agricultural career information to students.

I believe that occupational orientation in agriculture for seventh and eighth graders can be accomplished in modular form in about 40 instructional hours. The modular concept would involve "a free standing unit based on the job title."⁵ This would break down into 20 instructional hours for each year, which would allow for scheduling five or six other occupational orientation areas during one school year. Some units or areas which occupational orientation in agriculture for seventh and eighth graders might cover would include, but not be limited to, the following:

1. Identification of the seven agricultural occupation clusters used by the U.S.O.E.
2. Developing lists of job titles in each cluster.

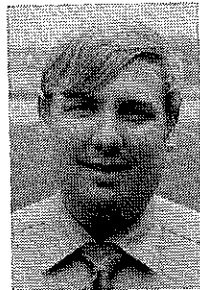
3. The role of agriculture in the economy.
4. The levels of employment in the world of work.
5. Identification of individuals who work at various job titles.
6. Analysis of information available about specific jobs.
7. Future trends in employment.
8. Presenting informational programs to others about jobs available.
9. Evaluation of personal interest in five selected job title areas.
10. Identification of jobs available in the local community.
11. Personality traits for career success.
12. Self concept development.
13. The role of youth groups in career study.
14. Investigation of a specific occupation by a small group or by each individual according to interest.
15. Making the decision to take or not to take further course work in the field of agriculture.
16. Individualized exploration of specific opportunities by students.

In the modules written for seventh and eighth grade occupational orientation, the units or areas were organized into instructional objectives and various methods of presentation used for the information involved. The methods of presentation are limited only by the imagination of the instructor and his students. Some interesting methods utilized in the modules included games, field trips, visual aids, small group discussion, resource persons, use of a resource center, and one to one observation of a worker on the job with the employer.

To keep pace with the changes in education and the trend towards comprehensive career orientation in grades K-12, we as agricultural educators have a responsibility to all students to inform them of the available agricultural careers. The orientation phase will be the

(Concluded on page 177)

JUNIOR HIGH SCHOOL AGRICULTURE IN URBAN AMERICA



Dale Bennett
Teacher of Agriculture
Gaithersburg Junior High School

and

Charles Reinhold
Teacher of Agriculture
Montgomery Village Junior High School
Gaithersburg, Maryland



Charles Reinhold

America is changing. The face of our land would be unrecognizable to a 19th century American. We have built millions of new homes, in thousands of new neighborhoods, producing large urban areas. In these urban areas vocational agriculture teachers have often allowed the school doors to be closed to them.

Innovative programs in agriculture and ornamental horticulture are starting to open these doors at the junior and senior high levels. In Gaithersburg, Maryland two junior high schools, Gaithersburg and Montgomery Village, are offering vocational agriculture programs and a new type of FFA for grades seven through nine. Montgomery County is adjacent to Washington, D.C. and is heavily urbanized.

With the advent of a seven period day, junior high students can select more subjects of special interest. This grade level student possesses a natural curiosity about living things, making the junior high level of education an ideal time to offer vocational agriculture courses in animal and plant sciences. Because it is a "learn by doing"

Using the natural outdoors and real animals, it is possible to provide students with real life experiences that will be erased from the blackboard but will stay with them for a lifetime.

type of program, it attracts and holds the interest of students whose ability is quite varied.

Philosophy of Program

We believe that agriculture is still a basic element of our culture and one of the pervasive influences on our way of life. Knowledge of the agricultural environment is important for all people. People need to become more and more involved in the raising of plants and animals. Living things are a major source of food, fiber and recreation. These will continue to play the key role in the life of all people.

Course Descriptions

Animal Science

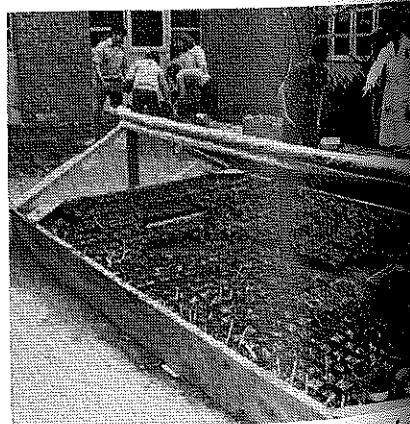
This course is a seventh grade elective. Students learn to identify various types and breeds of animals, and the most valued characteristics of each breed. Also, students learn about growth processes, techniques of care and management, and consumer products associated with the animals. Emphasis is placed on each student having the responsibility of raising and caring for an animal in a shelter at the school. Animals included in the student's study are: dairy, beef, swine, sheep, poultry, horses, dogs, cats, rabbits, and insects. Some time is used for the student to do individual study on a particular animal and report to the class.

Students are provided a laboratory-

field-classroom experience. They maintain a daily record of care and feeding of animals. Students care for rabbits, small laboratory animals, chickens, and hives of honey bees. Field trips are taken to dairy, beef, swine, horse and other animal farms. Particular skills are taught such as killing and dressing a chicken. The FFA is used as a means to provide students with public speaking, parliamentary procedure, contests, projects, and awards.

Plant Science

This course is an eighth grade elective. It is designed to provide students with an activity oriented learning by doing process. In the fall each student is assigned certain trees, shrubs and turf plots. They care for these throughout the year doing all the maintenance work necessary. By sharing window box greenhouses, each student is able to propagate numerous plants by cuttings and seeds. Plant identification is taught by having the students make tree leaf and weed collections. Squeezed in along with all this activity is the basic knowledge of plant parts, their function and the growth processes of plants. In the



Plant science students transplanting flats to cold frame.

(Continued on top next page)

(Bennett & Reinhold-Continued)

spring of the year it is garden time. The individual student is assigned a 400 square foot garden plot. He has complete responsibility to test the soil, plan, fertilize, seed, cultivate and harvest his crop. A high percentage of the students along with their parents continue this project throughout the summer. After completing the plant science phase of the program, the urban child should be able to care for the plants in and around his home and be aware of the "tender loving care" it takes to produce the fruits and vegetables he eats each day.

Environmental Agriculture and Horticulture

This course is a ninth grade elective. Students taking the course will have had various training in vocational agriculture: (1) no previous vocational agriculture; (2) have had animal science; (3) have had plant science; (4) have had both animal and plant science. By raising animals for sale as group projects, students gain experiences in production agriculture. Our facilities in an urban area limit this to smaller types of animals like laying hens, broiler chickens, worms, rabbits, cavy, quail and honeybees. In the ornamental horticulture part of this course, the students gain experiences in turf management, making cuttings, transplanting trees, pruning trees and shrubs. They are expected to make large insect and plant collections. All this is to help the student be aware of the knowledge and work necessary to take care of their

(Adams—from page 174)

ate curricula (and in some cases entry level jobs). This is the final function named by Matheny,¹ but to me the most important. Failure to adequately perform this function as I see it is one of the most basic reasons for underemployment and unemployment.

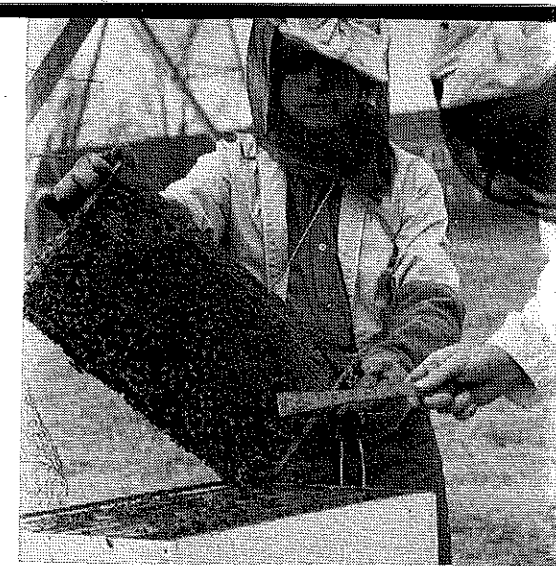
In career education, we must have more competent counselors and guidance experts. The junior high and middle school level is a fertile field for these assistants with expertise to work. A placement officer can be of great service only if he has the expertise to do the job. Will all teacher educators in our institutions of higher learning help? The answer is, I trust, "yes." As Bottoms³ states "Career education can-

present and/or future homes. About one fourth of the school year is used to raise truck crops for sale at a school produce stand operated during the summer. Many of the students use these projects as their supervised farming experience.

FFA Operation

During 1970-71, a traditional FFA chapter was organized for 7th, 8th, and 9th graders. Members participated in regular FFA contests and activities. Also, they were initiated as Green Hands.

At the conclusion of the year, an evaluation by teachers, colleagues, administrators, and students determined that the traditional FFA did not operate effectively in the junior high school. Therefore, an alternative was sought. In cooperation with the National FFA Center, a new FFA program was developed and initiated in the fall of 1971. By using the lower case letters, "ffa," an independent but intricate part of the FFA was formed on an experimental basis. Instead of having the traditional four degrees of active membership based upon achievement, five new areas with numerous tasks in each area were developed. The five areas are: Leadership Development; Career Orientation; Skill Development; Environmental Citizenship; and Safety. Upon completion of all the tasks in any one area, the student wins an achievement award. With the help of the Future Farmer Supply Service, a framed certificate-like award was developed to show any and all areas of



Instructor and student checking the conditions of a bee hive.

achievement completed by the student.

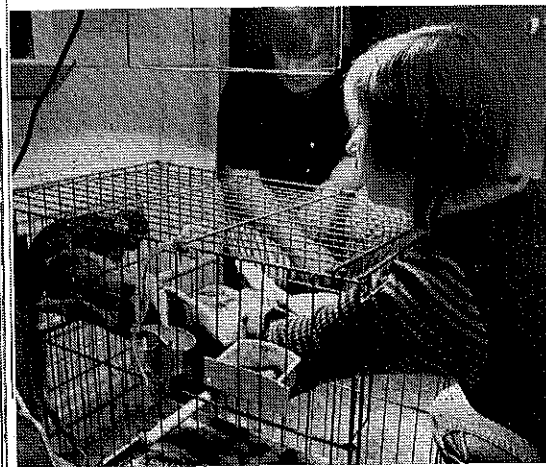
A new style identification was sought for the junior high school students. With the aid of the Future Farmer Supply Service, new windbreakers were developed. The windbreaker is royal blue in color with corn gold "ffa" in letters on the upper left side of the jacket.

The ffa is two-fold: (1) Each class is an ffa organization conducting monthly meetings and carrying on class activities related to ffa. Officers are re-elected each month giving all students a chance at leadership. All class ffa activities are considered part of the course. (2) A school ffa chapter is conducted similar to traditional FFA. The difference is that 7th and 8th graders do not obtain the degrees of active FFA membership or wear official FFA jackets. ♦♦♦

(Fredenburg—from page 175)

last step in the on-going career education program prior to the student making an occupational preference decision. The occupational preference decision must be made utilizing facts accumulated in orientation courses. Without proper orientation in the seventh and eighth grade the student may find himself in a course that fails to challenge him and that he has little or no aptitude for. ♦♦♦

1. Sidney P. Marland Jr., "Career Education: Every Student Headed For A Goal," *American Vocational Journal*, 47:3:35, March, 1972.
2. Lloyd J. Phipps, "Agricultural Education Moves to Meet Societal Change," *American Vocational Journal*, 46:9:20, December 1971.
3. Marland, loc. cit.
4. Philip B. Fredenburg, *Occupational Orientation In Agriculture For Seventh and Eighth Graders* (Masters Paper, MST Degree, University of Wisconsin-River Falls, River Falls, 1972), p. 38.
5. Bertran F. Wallace, "Modular Design, Another Method of Curriculum Development," *American Vocational Journal*, 47:5:42, May, 1972.



Student handling monkey, so cage can be cleaned.

JUNIOR HIGH PROGRAMS FOR CAREER EDUCATION

IN AGRICULTURE



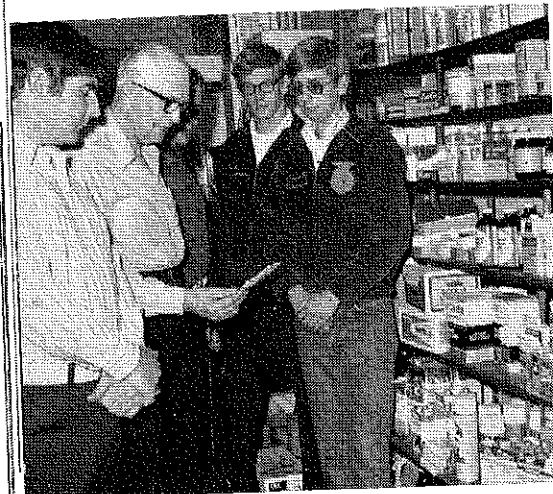
Obed L. Snowden

Obed L. Snowden
Professor and Head
Agricultural Education Department
Mississippi State University

This article is the second of three articles originating from comprehensive research conducted by the Department of Agricultural Education at Mississippi State University during the fiscal year 1971-72.¹ The first article, "Elementary Programs in Career Education in Agriculture," appeared in the January issue of this magazine. The details of how the research was conducted were described in the January article.

The basic research had as the prime objective the obtaining and validating of data to be used in developing a core curriculum for agriculture and agribusiness on all levels of education. Level II includes junior high programs (grades 7-8) and is designated as career exploration in agriculture. The various subject matter areas or modules as used in Level I, elementary programs, (grades K-6) career awareness in agriculture, are continued in Level II (grades 7-8), career exploration in agriculture.

In the research questionnaire, respondents were asked if the type of



Agricultural education trainees and occupational orientation students getting their first hand from the manager of a farmer cooperative.

The vocational agriculture teacher must assume a role of leadership and expertise in collecting valid information to include in job briefs prepared on occupations for agri-business and natural resources.

material and experiences shown below could and should be taught on the junior high level as a facet of career education. The ratings of the jury on the various modules, ranked from highest to lowest, were:

Careers in Agricultural Businesses

The units to be taught under this module ranked in order of importance were: (1) Kinds of occupations; (2) Hands-on and mind-on experiences; (3) Nature of work; (4) Levels of employment; (5) Preparation needed for job entry; and (6) Range in pay.

Careers in Plant Science

The units to be taught under this module ranked in order of importance were: (1) Kinds of occupations; (2) Nature of work; (3) Preparation needed for job entry; (4) Hands-on and mind-on experiences; (5) Levels of employment; and (6) Range in pay.

Careers in Agricultural Leadership

The units to be taught under this module ranked in order of importance were: (1) Nature of work; (2) Hands-on and mind-on experiences; (3) Kinds of occupations; (4) Levels of employment; (5) Preparation needed for job entry; and (6) Range in pay.

Careers in Agricultural Mechanics

The units to be taught under this module ranked in order of importance were: (1) Hands-on and mind-on experiences; (2) Kinds of occupations; (3) Nature of work; (4) Levels of employment; (5) Preparation needed for job entry; and (6) Range in pay.

Careers in Soil Science

The units to be taught under this module ranked in order of importance were: (1) Hands-on and mind-on experiences; (2) Kinds of occupations; (3) Levels of employment; (4) Nature of work; (5) Preparation needed for job entry; and (6) Range in pay.

R. Glenn Shoemaker
Research Associate
Research Coordinating Unit
Mississippi State University



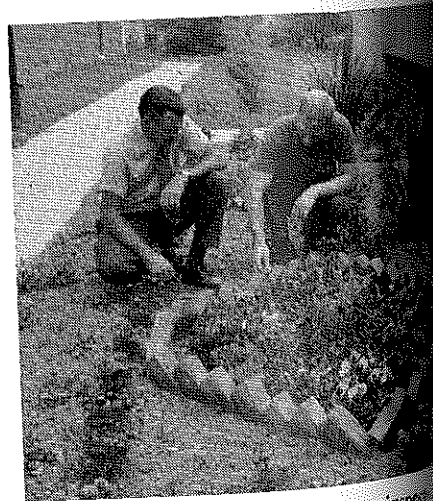
R. G. Shoemaker

Careers in Animal Science

The units to be taught under this module ranked in order of importance were: (1) Kinds of occupations; (2) Hands-on and mind-on experiences; (3) Nature of work; (4) Levels of employment; (5) Preparation needed for job entry; and (6) Range in pay.

Notwithstanding the fact that all items under each module were rated high by the jury, it was evident that two items, (1) kinds of occupations and (2) hands-on and mind-on experiences, consistently received higher ratings. This indicates that the vocational agriculture teacher will have a tremendous challenge in providing students with valid materials and experiences to explore their interest in any of the six job clusters for agribusiness and natural resources. Another point also seems evident — the vocational agriculture teacher must provide the leadership and expertise in identifying the kinds of occupations available under each module and in addition, he should take the available facilities and resources and provide hands-on and

(Continued on next page)



Vocational agriculture teachers are inspecting plantings for school campus beautification. Such areas are excellent for providing hands-on and mind-on experiences for teachers in Plant Science.

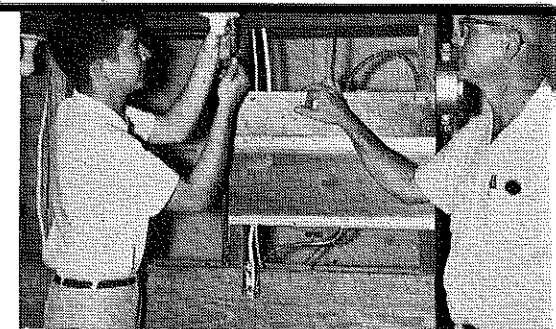
(Snowden & Shoemaker from page 178) mind-on experiences for students interested in agricultural or agri-related occupations.

Listing careers or jobs available in each subject matter module is important and should be the first step in preparation for career exploration. Also, detailed information concerning instructional units for each job should be developed. Information contained in these job briefs would correspond closely to the four remaining units under each module: (1) Nature of work; (2) Levels of employment; (3) Preparation needed for job entry; and (4) Range in pay. Again, this information does not necessarily mean a comprehensive evaluation of each job. However, it should answer students' primary questions and if interests increase, the student could conduct in-depth career research on his own. Job briefs also can prove very helpful to guidance personnel in working with individual students and groups of stu-

dents interested in occupations related to agribusiness and natural resources.

Other important activities of the vocational agriculture teacher in assisting junior high teachers and/or guidance personnel with career exploration in agribusiness and natural resources occupations is that of helping to plan field trips and arrange for the use of resource persons.

Production agriculture is truly a vital area of agribusiness and natural resources since it is the point from which other areas in agriculture are developed. Through production agriculture the vocational agriculture teacher can help the junior high teacher become involved with tasks associated with the job opportunities on farms, which is the foundation for the area of agribusiness and natural resources. Therefore, the vocational agriculture teacher's role as a consultant can be one of utmost importance to the students, as well as to the entire field of agriculture and agribusiness.



Electricity laboratory area in the agricultural mechanics shop is a "natural" for providing exploratory experiences in the work of the electrical trade.

In conclusion, with the help of the vocational agriculture teacher, all student interests toward agribusiness and natural resources should have been explored by the end of Level II. In this process the vocational agriculture teacher is a ready source of knowledge and experiences for use by all school personnel who work with junior high school career exploration programs. ♦

1. Snowden, O. L. et al. *Core Curriculum for Agriculture and Agribusiness on All Levels of Education*. Mississippi State, Mississippi: Agricultural Education Department, 1972.

From the Book Review Editors Desk . . .

BOOKS AWAITING REVIEW

SELLING FARM AND GARDEN SUPPLIES

By Lawrence Walsh, Robert Joy, Norman Hoover
Gregg Division/McGraw Hill Book Co.

THE COMPLETE ECOLOGY FACT BOOK

By Philip Nobile, John Deedy
Doubleday Company, Inc.

PHYSICAL EDAPHOLOGY

By Sterling A. Taylor
Ed. by Gaylen L. Ashcroft
W. H. Freeman and Company

HANDBOOK ON AGRICULTURAL EDUCATION IN PUBLIC SCHOOLS

By Lloyd J. Phipps
The Interstate Printers and Publishers, Inc.

AN INTRODUCTION TO STATISTICAL SCIENCE IN AGRICULTURE

By D. J. Finney
John Wiley and Sons, Inc.

AMERICAN COOPERATION 1971

American Institute of Cooperation

CONTRACT FARMING AND ECONOMIC INTEGRATION

By Ewell Paul Roy
Interstate Printers and Publishers

IN TOUCH WITH STUDENTS

By John R. Campbell
Educational Affairs Publishers

ANIMALS IN THE AMERICAN ECONOMY

By John A. Sims, Leslie Johnson
Iowa State University Press

DISEASES OF CROP PLANTS

By J. H. Western
John Wiley and Sons

GEOLOGY OF SOILS

By Charles B. Hunt
W. H. Freeman and Co.

THE STUDY OF SOIL IN THE FIELD

By G. R. Clarke
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SOIL SCIENCE

By R. L. Hausenbuiller
Wm. C. Brown Co. Publishers

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Educators Progress Service, Inc.

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33rd NATIONAL ALPHA TAU ALPHA CONCLAVE—

KANSAS CITY HIGHLIGHT



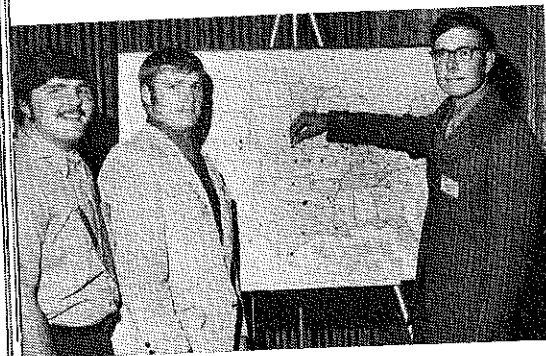
James Albracht

James Albracht
National ATA President
Kansas State University

The 33rd National Alpha Tau Alpha Conclave was held in Kansas City, October 10-12, 1972. One hundred twenty-five students representing 30 ATA chapters from colleges which have teacher education programs in agriculture were in attendance. A new chapter, Wisconsin State University, River Falls, was accepted by the delegates at the Conclave. Four other new chapters had been accepted into the organization during the past two years.

A highlight of the conclave included the awarding of Honorary Memberships to Mr. Don McDowell, Executive Director of the FFA Foundation, Mr. Sam Stenzel, Assistant Executive Secretary of the NVATA; and Mr. Howard Teal, President of the NVATA. These individuals were cited for promoting high ideals and standards in agriculture education which is the major purpose of Alpha Tau Alpha. The initiation ceremony was performed by the Missouri ATA Chapter.

Keynote speakers at the Conclave included Dr. Roy Dillon, University of Nebraska and Editor of the Agricultural Education Magazine, and Mr. Don Kimmel, Marketing Coordinator

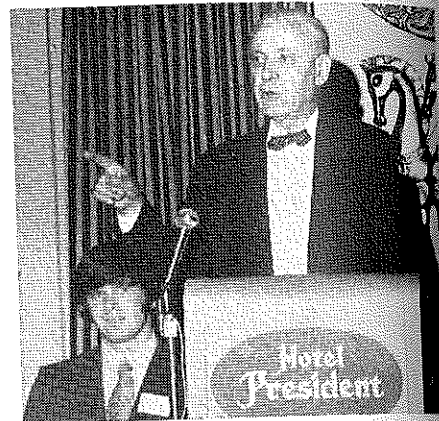


Dennis Cetak, Duane Lechtenberg, and Don Hagstrom, Beta Chapter from the University of Nebraska, light the national map at the opening of the National ATA Conclave. Photo by Richard Douglass.

of the Funk Seed Company. Other program participants included Phil Johnson, Vice-president of the National FFA, Russ Guin, Chairman of the Board, Interstate Printers and Publishers, Walter Jacoby, Youth Director, American Institute of Cooperation, J. C. Atherton, Louisiana State University, and the National ATA officers, James Albracht, Kansas State University, President; Norman Hoover, Pennsylvania State University, Vice-president; and Martin McMillan, Virginia Polytechnic Institute, Secretary-treasurer. Dr. David Williams University of Illinois, was elected Vice-president to succeed Dr. Norman Hoover whose term had expired.

Activities were planned to maximize delegate interaction. In addition to small group sessions and a symposium, a social mixer was led by Dr. Robert Johnson of Kansas State University. Larry Carnahan and Dennis Brown of Kansas State University, L. C. Harold of Virginia, and Glen Higgenboth of the University of Arkansas served as student chairman for the Conclave.

Alpha Tau Alpha, which was started in 1921, is the National Honorary Fraternity for students majoring in agricultural education. Initiates are selected on the basis of scholarship and leadership qualities. The goal of the national organization of ATA is to have a chapter in each of the institutions where vocational agriculture instructors are prepared. Membership in Alpha Tau Alpha usually includes sophomore, junior, and senior college students in the Agricultural Education Curriculum. Some chapters of ATA include all students in the agricultural education curriculum by extending junior memberships to freshman and other students until they become eligible for national



Russell Guin, Interstate Publishers, presented the opening remarks at the Conclave. Photo by Richard Douglass.

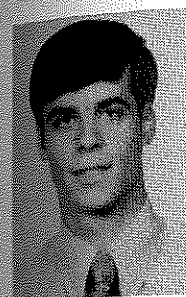
membership in ATA. The more effective ATA chapters are those which emphasize leadership development prior to the senior year.

Students in teacher education institutions who would like to start a chapter of Alpha Tau Alpha should receive approval from their administrators and petition the national ATA organization for a charter.



Don Kimmel, Public Relations from Funk Seed Company, former State FFA President from Illinois, said at the ATA breakfast, "We must become salesmen for American agriculture." Photo by Richard Douglass.

REFLECTIONS ON— THE NATIONAL STUDENT TEACHER CONFERENCE



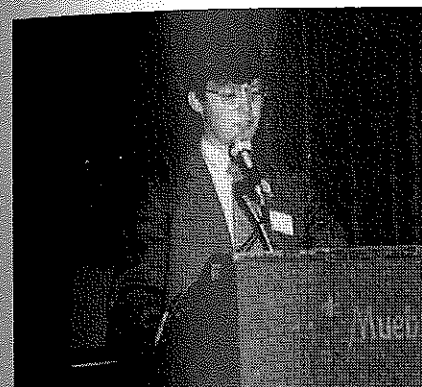
Richard A. Zimmerman, Student Chairman
University of Illinois

and

Robert W. Walker, Conference Chairman
University of Illinois



Robert W. Walker



Terry Lancaster, University of Illinois, addresses the Student Teacher Conference. Photo by Robert Walker.

The twenty-first Annual National Conference of Student Teachers in Agricultural Education was held at Kansas City on October 11-12, 1972, in conjunction with the National Alpha Tau Alpha Conclave and the National F.F.A. Convention. The theme for the conference was "Relating Vocational Agriculture Programs to Career Education." Two hundred thirty-nine student teachers, 62 staff members, and 25 guests representing 45 institutions in 31 states registered for one of the largest student teacher conferences since the first annual event twenty-one years ago.

What did we accomplish? First, the conference was of great personal importance to each of the participants. It was an opportunity for student teachers from all across America to meet each other and exchange views and experiences. The conference provided a comfortable "home base" for those of us with similar goals who came from farms and small towns to the noisy Kansas City streets and the awesome National F.F.A. Convention. We became acquainted as friends —

perhaps not by name or even by recognition, but at least in ideal and understanding. An almost startling realization is that Central Illinois is not the only area with agriculture — and teachers of agriculture. If we ever lose this realization, we will cut off opportunities for the self-improvement gained by recognizing the merits of others.

The informal "get-acquainted" hour sponsored by NVATA provided the nudge to get the conference "rolling." The National Vocational Agriculture Teacher's Association provides a central organization to help us as teachers of agriculture to stay in contact with each other and to be aware of the needs and accomplishments of agriculture teachers from other states. Sincere appreciation is extended to Jim Wall, Executive Secretary of NVATA, Howard E. Teal, President, and all the NVATA officers and members for their significant contribution to the conference.

The banquet sponsored by Farmland Industries was a high point of the conference, as was concurred by many conference participants in their evaluation. The meal and the enthusiastic talk by Jim Thomsen, a Farmland executive and former agriculture teacher, set the scene for an excellent display of the support vocational agriculture receives from agricultural industry.

"Why I Teach Vocational Agriculture," related by B. Oscar Brown from Salem, Missouri, has become a conference tradition. Mr. Brown has spoken at all 21 of the annual conferences, and he related some of the most cherished memories of his 34 years of teaching agriculture. Anticipation of these types of memories leaves the stu-

dent teacher with more determination to reach his goal, to become the best vocational agriculture teacher in the country.

The panel discussion on career education alerted us to the urgency of this new approach to agricultural education. Ideas expressed by the panel members representing eight different states again reminded us that we cannot isolate ourselves within our familiar locality. We need the exchange of ideas with other agriculture teachers from all parts of the country to keep our programs growing and improving. If we can ever say, "I now have the ideal program; no aspect of it can be improved," we have doomed ourselves and our programs to failure.

Small group discussions on topics of universal concern to vocational agriculture teachers gave us the opportunity to meet on a more personal basis. Here each conference participant was able to contribute some of his philosophy to other group members. This exchange reinforced friendships already established, created new friendships, and presented ideas to help improve programs in all parts of the United States.



Student teachers participate in small group discussions at the National Student Teacher Conference. Photo by Robert Walker.

(Continued from page 183)

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(Concluded on page 187)

THE TEACHER'S ROLE IN CAREER GUIDANCE

Arba L. Henry
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Solanco Senior High School
Quarryville, Pennsylvania



Arba L. Henry

problems, health problems, financial problems, recreational and leisure-time problems, and problems of civic responsibility which require choices and decisions.

Guidance is an essential part of education. Vocational guidance, an important aspect of vocational agriculture, is the process of assisting an individual to choose an occupation, prepare for it, adjust to it, and progress in it.

It can no longer be taken for granted that a farm student will take over the home farm for there are fewer and fewer opportunities available for farm placement. With the advent of more and more industries, the costs of land and farm equipment and the increase in the number of cooperate farms, one finds it difficult if not impossible in some instances to enter into a career in farming.

The teacher of agriculture, by training and experience, is more familiar with the complex array of job opportunities in agriculture than any other member of the high school staff. Therefore, he must assume his responsibility as a member of the guidance team if interested students are to find their place in the agricultural world of work.

I do not feel that there can be enough said about the value of home visits in relation to the guidance program an agriculture teacher provides. The home visits, the participation in projects and the time devoted to the subject cause the teacher to know the student's abilities and parent's interest.

Today, the vocational agriculture

I feel that state certification requirements should stipulate a specific number of hours in courses centered around guidance and guidance responsibilities of the vocational agriculture teacher.

teacher's role in guidance is more important than it ever has been before. Every year hundreds of thousands of youngsters leave school to make their way in the world of work. Some succeed and some fail. It is those who fail that are our major concern. If you as an agriculture teacher can save one individual from failing, whether he be in or out of school, then I think we can say that the guidance service performed by the teacher has been a success.

Some students have problems in the area of guidance that are too specialized or difficult for an average teacher of agriculture to handle. A teacher should not attempt to guide a student in an area in which he is not qualified. Rather, the teacher should work as a member of a guidance team. In order for a guidance team to be effective the school guidance counselor must have a thorough understanding of the agricultural program. This may be accomplished by:

- (1) Offering to assist in presenting your courses to prospective students,
- (2) Maintain lines of communication between teachers and counselors in feeder schools,
- (3) Conduct tours of facilities for entering students,
- (4) Invite counselors to visit classes informally and observe activities.

With this aspect then, I feel it would be desirable for the vocational agriculture teacher to begin his guidance program when students are in the eighth grade. In schools where there is a junior high agriculture program in existence, guidance services could in all probability begin as early as sixth or seventh grade. This would be an excellent time

to orient all students with careers in agriculture.

For a guidance program in agriculture to be successful it should include:

- (1) Orientation program and materials for students, parents, guidance counselors, school administrators, and school board members,
- (2) The use of tests to determine interests,
- (3) Organized and planned study of occupations in agri-industry.

Why do the students consult the agriculture teacher about their problems more than they do most other teachers of the school? There are several important reasons which explain the unusual student-teacher relationship.

The agriculture teacher has a rather unique situation in that many times he meets with the students two class periods or more a day rather than just one period. In addition the teacher's responsibility for supervising experience programs and projects involves several important aspects in the area of counseling. The teacher sees the home, the parents, and the conditions under which the student lives.

The teacher is able to observe the student on an informal social basis through the FFA. There are fairs, committee meetings, judging teams, and many other activities which offer the agriculture teacher an opportunity to get to know and help his students individually.

A vocational agriculture teacher's guidance responsibilities in the future look even more important than they do today. With the many job opportunities available in agriculture and its related fields the agriculture teacher will be called upon to try and find someone to fill the vacancies. If the teacher does not provide the guidance necessary or does not begin the guidance responsibilities early enough, agriculture and all of its related fields will suffer.

I feel that state certification requirements should stipulate a specified number of hours in courses centered around guidance and guidance responsibilities of the vocational agriculture teacher. This would be an excellent time

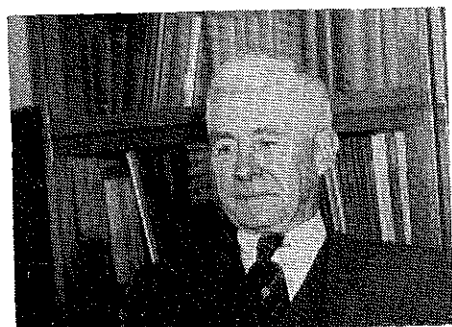
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John M. Lowe

Separation by two hundred miles did not prevent John Moore Lowe, in the State Department of Education, Charleston, and Dr. Dickson Ward Parsons, in teacher education, West Virginia University, Morgantown, from working as a team in promoting agricultural education. In the early thirties they inaugurated joint staff conferences with at least two held each year; one in the State Department of Education and the other one at the university. At these conferences, interested individuals from other services were invited to attend. Mutual problems were discussed with satisfactory plans made for conducting future activities. This method developed a wholesome relationship with other departments in the university and in the State Department of Education, as well as with a number of cooperating agencies. The total program in West Virginia was strengthened through this system of cooperation.

In addition to the joint staff conferences held annually, the two men cooperated with their staff members in planning and conducting workshops. These workshops were conducted annually on a regional or statewide basis for the main purpose of improving instruction by keeping the teachers up to



Dickson Ward Parsons

WEST VIRGINIA PIONEERS—

Cooperated In Agricultural Education

JOHN M. LOWE & D. W. PARSONS

date on subject matter and in methods of teaching. Each year a joint meeting was held with the program and policy committee of vocational agriculture teachers to plan the annual vocational agriculture teachers conference.

Dr. Parsons or one of his staff members served annually on the team with a state department staff member and others to visit and select American Farmer candidates. He was also active as a consultant in planning and conducting FFA conventions and leadership training conferences.

JOHN MOORE LOWE

Mr. Lowe was born January 21, 1892 at Bridgeport. He was graduated from West Virginia University with a B.S. Agr. Degree in 1917 and received a M.S. Degree in 1931. During 1917-19 he served as county agent and taught science in high school for one year. He served as vocational agriculture teacher in Morgantown from 1919 to 1934, when he was appointed state supervisor of vocational agriculture and assistant director of vocational education with headquarters in Charleston. He served in this capacity until 1944, when he was named state director of vocational education and state supervisor of vocational agriculture. He became the first full-time state director of vocational education in 1946 and served until his retirement in 1957.

During his tenure as state supervisor, Mr. Lowe served as a representative of the North Atlantic Region-Program Committee 1936-1946; National FFA Board of Directors 1943-1945; National FFA Foundation Board of Trustees 1946-1950; and regional chairman FFA committee prior to 1946.

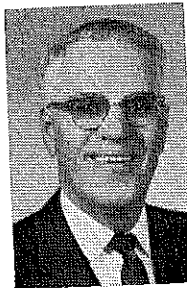
He holds three life memberships — American Vocational Association, presented by the West Virginia Vocational Association; National Association of State Directors of Vocational Education; and National Association Supervisors of Agricultural Education. He

was presented the FFA Honorary American Farmer Degree by the national organization, and the FFA Honorary State Farmer and the Honorary Future Homemaker degrees by the state associations.

Plaques of appreciation were awarded to Mr. Lowe as follows; North Atlantic Regional Conference in recognition of distinguished service 1919-1957; American Vocational Association for years of support and loyal service; West Virginia Association FFA in appreciation — State Advisor 1934-1946 and for 20 years of service 1928-1948. In 1958 the 22nd Conference of the West Virginia Farm and Home Electrification Council presented Mr. Lowe with a special citation for his service as chairman of the council and as a member of the original group that planned the merger of the farm educational groups with the supplier groups to form the Rural Electrification Council.

Mr. Lowe was one of the leaders in the establishment and operation of the State FFA-FHA Camp and Conference Center, which was later named "Cedar Lakes." He wrote the bill which was enacted by West Virginia Legislature authorizing the West Virginia Board of Education to establish and operate such a facility. He was instrumental in incorporating the West Virginia FFA-FHA Foundation to assist in the raising of funds to help finance the establishment of the camp.

(Continued on top next page)



W. H. Wayman

W. H. Wayman is former State Supervisor of Vocational Agriculture, West Virginia.

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He was the first president and served one year after retirement as managing director of the West Virginia Future Farmers of America and Future Homemakers of America Foundation, Inc.

As state director of vocational education, Lowe helped to organize and operate the statewide Institutional On-Farm Training Program for Veterans; the Vocational Training for Out-of-School Youth and Adults; and the School Community Food Preservation Program.

Mr. Lowe was an outstanding administrator and highly respected by academic as well as vocational educators and personnel of all agricultural agencies. He was soft-spoken and devoted much time to planning and executing vocational educational programs during his administrative career.

DR. DICKSON WARD PARSONS

Dr. Parsons was born August 21, 1881 in Randolph County. He was

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graduated from West Virginia University Prep School in 1901. He received his A.B. Degree from West Virginia University in 1905; an M.S. Degree from Wisconsin University in 1918; and a Ph.D. Degree from Cornell University in 1930.

Dr. Parsons taught science and math at Lake Charles, Louisiana 1905-07; science and math at Montgomery Prep Branch, Montgomery 1907-15; was superintendent and principal, Kingwood High School 1915-17; then served as county agricultural agent in Lewis County until 1920. He taught vocational agriculture and served as principal of Shinnston High School 1920-23. He served as instructor and professor of agricultural education at West Virginia University 1923-51 and was head of the department from 1933 to 1951 when he retired. He also served as acting state supervisor of vocational agriculture 1923-24 and 1925-26.

Dr. Parsons served on the research committee of the North Atlantic Re-

gion. He is a member of the Phi Delta Kappa, several masonic bodies and the West Virginia University Emeritus Club.

Dr. Parsons is a man of few words, but no one has any doubt as to his position regarding any issue. He is highly respected for his sound judgment, not only in the field of education and agriculture but also in domestic and world affairs. He has always promoted conservation practices and good land use and as an avid sportsman, he has spent many hours hunting and fishing with his friends.

Both Mr. Lowe and Dr. Parsons were highly dedicated to their work. Mr. Lowe had at heart the interest and welfare of each individual serving under his supervision while Dr. Parsons was equally interested in each of his students and the teachers. Encouragement was always given by both men to continue education and seek opportunities for advancement.

(Concluded on page 191)

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DOES INSTRUCTION INCREASE OCCUPATIONAL INTERESTS?

J. Marvin Robertson
Assistant Professor of Vocational Education
University of Georgia, Athens



J. M. Robertson

Career education has increased the importance of teaching about occupational opportunities in agriculture. Career awareness has been identified as one of the elements of career education. The student progresses from a broad understanding of career opportunities to active career exploration and career identity.

A part of the awareness and identity process revolves around the student's occupational interests. One approach assumes that more information about agricultural occupations would increase interests in agricultural careers. Do the occupational interests of vocational agriculture students change as a result of organized classroom instruction about occupations in agriculture? The study reported explored an answer to that question.

Nature of Interests

Interests are an aspect of personality — but a separate entity. The concept of interests is part of such factors of personality as attitudes, aspirations, motivation, and satisfaction. Interests are treated separately because no way has been found to look at the whole of personality. Those interests that influence the behavior of selecting and performing in an occupation are applicable to vocational education.

Interests were defined in the study as:

Vocational Interests: a tendency to make consistent choices specific to the present or future work role portion of an individual's life in a certain direction without external pressure and in the face of alternatives.

Manifest Interest: implied by the behavioral activity or choice that has been made. When an individual has selected a course or a job, he has exhibited a manifest interest.

Expressed Interest: as stated by the individual.

Inventoried Interest: that aspect of vocational interests quantified by common interest inventories or "tests."

The unit "Career Opportunities" was taught to sophomore students of vocational agriculture in one Michigan high school for six weeks with a control group matched on interest variables. In a second school the unit was taught to eleventh and twelfth grade students in a horticulture class for eight weeks. Eleventh and twelfth grade students in a production agriculture class and in a general mechanics class comprised the control groups.

All participants were administered the *Ohio Vocational Interest Survey (OVIS)* as a pre- and post-measure of inventoried interests. *Expressed interests* were obtained by asking the student to state his occupational plans. The present enrollment in a vocational agriculture class was taken as a measure of *manifest interest* in agricultural occupations. Student outcomes from the instruction were assessed in terms of the change in direction, intensity, and clarity of students' interests in agricultural occupations and the congruence of the interests with occupational and educational plans.

Findings

Groups differed on variables of previous enrollment in agriculture, place of residence, and fathers' occupation.

The sophomore treatment and control groups did not differ on inventoried interests in agriculture as measured by OVIS. The groups exhibited maximum difference on manifest interest — (students in treatment groups were all enrolled in Vo-ag and students in control groups had never been enrolled).

The eleventh and twelfth grade groups were congruent within each group on measures of inventoried, expressed, and manifest interests. There was wide variation between groups. Both groups of students in vocational

Indications are that the teacher of vocational agriculture should teach occupational information to ALL students in the school earlier than the sophomore year.

agriculture classes (the treatment group of students in horticulture and the control group of students in production agriculture) expressed interest in entering an agricultural occupation and had inventoried interests in agriculture.

Neither treatment group increased interests in agricultural occupations as a result of instruction. The sophomore, junior, and senior students who were taught information about occupations in agriculture did not increase inventoried interest in agricultural occupations as measured by OVIS. The students did not increase expressed interests as measured by the number of students who stated an intention to engage in an agricultural occupation.

Implications

The results would not support the practice of teaching about occupations in agriculture for the purpose of increasing the interest of students or to increase the number of students desiring to enter occupations in agriculture. Teaching of such units for other purposes were not investigated.

Twenty-six sophomores with inventoried interests in agriculture and expressed interests in an agricultural occupation were not enrolled in vocational agriculture compared to thirteen enrolled. Indications are that the teacher of vocational agriculture should teach occupational information to all students in the school earlier than the sophomore year. The instruction plus additional counseling should result in a vocational agriculture class containing more students having congruent manifest, inventoried and expressed interests.

(Concluded on page 191)

NEW ZEALAND AGRICULTURE ...

Quality And Profit Is Their Goal

Gary Jones
Vocational Agriculture Instructor
Peabody, Kansas



Gary Jones

Farmers in New Zealand are just like American farmers, they try to produce a good product and hope to make a small profit. Like American farmers they are excelling in producing a top quality product but are finding it more difficult to make a profit. Since New Zealand farmers must export about 80 percent of their products, they are at the mercy of the world market. Their chief products for export are wool, lamb, beef, cheese, milk, and butter.

Having been host to two New Zealand Young Farmers, in cooperation with the National and Kansas FFA Association, and being very interested in the sheep industry, my family and I spent a month visiting and studying New Zealand sheep farms. We made the trip from July 16 to August 13, 1971, which was the middle of winter. Even though it was winter there, the weather was very moderate, ranging from about 16 degrees F. at night but by noon being in the 50's in the South Island and from 40 to 50 degrees in the North Island. However, it must be remembered that New Zealand is about 7500 miles from Kansas on the bottom side of the world with the seasons in reverse. On many of the farms visited, we were the first Americans ever to visit them. We tried to visit the farms off the beaten path. The people were certainly friendly towards us, in fact, we were treated like long time friends. The farms would be considered to be modest to average size with machinery and equipment very much comparing to ours. Much of their machinery was the same brand names as ours, except it's made in England or Australia.

The chief differences in New Zealand farming and American farming is that they stress grass and more grass and lots of sheep. Beef cattle are becoming more popular, due to the de-

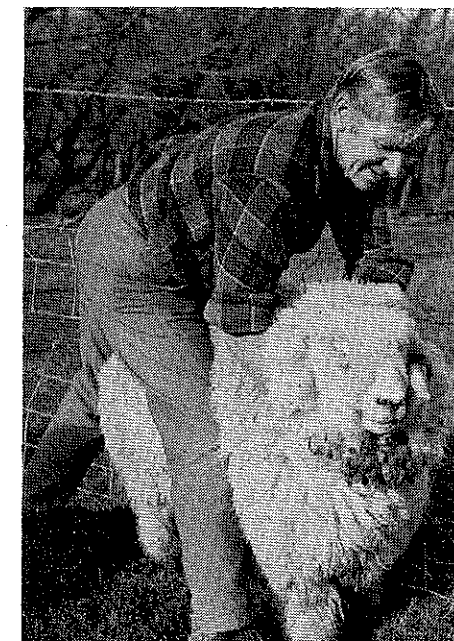
pressed wool market. Hogs are very scarce since very little grain is produced in the country. We did see some poultry production around the Canterbury area, where they do produce a small amount of wheat, oats, and barley. Dairying was quite heavy in the North Island. The area around Hamilton boasts more dairy cows per square mile than any place in the world. Jerseys seemed to be the most popular breed with Holsteins gaining rapidly.

All animals are fed nothing but grass. They are finished out for slaughter (they call it ready for the freezing works) on grass. Lambs are finished out as hoggetts (6 months old) for the freezing works and steers as three year olds. The quality of this meat was excellent and with a fine flavor. Lambs weigh about 60 pounds when ready for the works and steers about 1,000 pounds. All of their animals are sold on dressed carcass basis to the freezing works.

A visit to W. H. Andrews famous Punchbowl Southdown farm was a real experience. Several of his Southdowns have been imported to America and have been a real boost for the Southdown breed. His Punchbowl Southdowns are much larger than any Southdowns in this country. Many of his rams weigh near the 300 pound level.

A New Zealand hill country Merino farm in Central Otago was quite different than some of the other sheep farms. Wool was the prime product being produced there and they were a bit discouraged over the wool price situation. Many of their rams would shear 25 to 30 pounds of the finest wool in the world.

It was shearing time, in the South Island, while we were visiting there. Blade or hand sheering was still being practiced on the Armstrong farm of Central Otago. The Armstrongs felt that the inch of wool remaining on the ewes helped to keep them from chilling due to an early cold spell. They were also trying a few of the new Drysdale



Mr. Gerald Gillespie, owner of "Glen-Ida" farm of South Otago showing one of his 2500 Romney ewes. Romneys are the most popular breed of sheep in New Zealand.

sheep this year. The Drysdale were developed for their excellent carpet grade wool.

On the Gerald Gillespie, "Glen-Ida," farm in Central Otago were some outstanding Romney sheep. The Romneys are the most popular breed in New Zealand, with the Gillespies have a "mob" of 2500 ewes. The Romneys are a hearty breed thriving in the New Zealand lowlands. They produce a top quality fleece of 10 to 12 pounds as well as a superb carcass for the freezing works. The best ewes are mated with the Southdown rams for strictly freezing works lambs.

Very little agriculture is taught on the high school level. One reason might be that many farmers send their children to private boarding schools in the cities because the farms are very remote. Another reason might be that the students can "test out" of school when they are fifteen. They can then take special short courses at several of their agriculture schools. They do have a rather complete selection of short

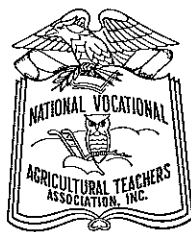
(Concluded on page 191)



Sam Stenzel

News and Views of NVATA

Sam Stenzel
Assistant To The Executive Secretary, NVATA
Lincoln, Nebraska



Over 700 Agricultural Educators joined approximately 6,000 Vocational Educators in Chicago for their Annual Convention, December 1-6. The 24th National Vocational Agricultural Teachers' Association (NVATA) Convention ran concurrently with that of the American Vocational Association (AVA). The program included general sessions, departmental, divisional, and Regional meetings, business meetings, awards, receptions and luncheons. The week long convention brought Vocational Educators in Agriculture — classroom teachers, teacher educators, and state supervisors — together from all sections of the United States for the purpose of discussing mutual problems, studying transitional innovations, and becoming more knowledgeable about the total program of career education in agriculture. "Agricultural Leadership for Career Education" was the theme for the Agricultural Division. Topics included "Career Education in Elementary Grades," "Education for the Disadvantaged and Handicapped," "Relating Occupational Programs to Career Education Models," and "Manpower Data for Agribusiness Education."

The United States Steel Corporation sponsored the "NVATA Outstanding Young Member Award." It was designed to recognize a member's participation in the activities of NVATA. Six teachers, one from each of the NVATA Regions, won trips to the convention. One of the requirements for entering the contest is that the individual must

(Arba Henry—from page 185)

have taught at least 3 years but not more than 5 years. The Winners were:

- Region I — Joe Navrath, Hillsdale, Wyoming
- Region II — Richard Watson, Sulphur Springs, Texas
- Region III — Rex Carlson, Cresco, Iowa
- Region IV — Donald Dilgard, Ashland, Ohio
- Region V — Marion Riviere, Alachua, Florida
- Region VI — George Dunsmore, St. Albans, Vermont

The New Holland Division of Sperry Rand Corporation sponsored the "NVATA Agricultural Career Orientation Award." It was designed to encourage teachers of Vocational Agriculture to put a continuing emphasis on informing students about the opportunities in agribusiness.

The Regional Winners for the 1972 Award receiving trips to the National Convention were:

- Region I — Roy Reno, Riverton, Wyoming
- Region II — Bobby Viertel, Eaton, Colorado
- Region III — Allen G. Blezek, Randolph, Iowa
- Region IV — Gary Moore, Beverly, Ohio
- Region V — Garland Woody, Hot Springs, North Carolina
- Region VI — Thomas D. Burgess, Danville, Virginia

Pfizer and Company presented three NVATA Agriculture Teacher Recognition Awards. The \$500 award is made annually to the vocational agriculture teacher who was the advisor to the national winner of the FFA Agriculture Proficiency Award in either livestock, dairy or poultry. The 1972 winners of the Awards were:

- James C. Shewbart, Danville, Alabama — Poultry Proficiency Recipient
- Virgil S. Koppes, Medina, Ohio — Dairy Proficiency Recipient
- Lewis Lauterbach, Osage, Iowa — Livestock Proficiency Recipient

An outstanding teacher of vocational agriculture is selected annually by the CIBA-Geigy Corporation as national winner of the Professional Recognition Award. The winner went on a 10 day, all expense-paid agricultural tour of Europe. He joined representatives of several other organizations as guests of Geigy Agricultural Chemicals, Division of CIBA-Geigy Corporation, for the tour in mid July. All active NVATA members are eligible to enter the contest. The national winner was: Ernest Muncrief, Marlow Oklahoma—

- Region I — Fred A. Beckman, Weiser, Idaho
- Region II — Ernest Muncrief, Marlow, Oklahoma
- Region III — Grover C. Mische, Monticello, Iowa
- Region IV — Melvin J. Nicol, Maroa, Illinois
- Region V — Jack C. Cole, Marshall, North Carolina
- Region VI — John H. Aylor, Wardsville, West Virginia

ably because of the situations which were presented to them while they were vocational agriculture instructors.

All guidance in agriculture should center around the general objectives of vocational guidance, which are:

- (1) Providing individuals with the information and skills needed to make wise decisions concerning problems of vocational adjustment.

- (2) To help teachers to become more proficient in carrying out the responsibilities.

- (3) Encouraging new activities.
- If the agriculture teacher meets the above general objectives of vocational guidance, his role in guidance in vocational agriculture will be a meaningful and worthwhile adventure. ♦♦♦

BOOK REVIEWS

COMMISSION ON EDUCATION IN AGRICULTURE AND NATURAL RESOURCES. (Summary of Proceedings of Regional Conferences) *Undergraduate Education in the Biological Sciences for Students in Agriculture and Natural Resources*. Washington: National Academy of Science, 1971. 169 pages. Cost \$6.95.

Contained in this publication is a summary of the proceedings of regional conferences held by the Commission on Education in Agriculture and Natural Resources. The work of the Commission on Education in Agriculture and Natural Resources was supported through a contract between the National Academy of Sciences and the National Science Foundation. The regional conferences were held as a followup to the national conference sponsored by the Commission* under the title, "Undergraduate Education in the Biological Sciences for Students in Agriculture and Natural Resources."

The personnel involved in the regional conferences were teaching faculty members, department heads, and deans of agriculture, forestry and other natural resource areas, and biology. The attention of the participants were directed to two general objectives: "(1) to acquaint the instructional staffs in agriculture and natural resources with the changes that are taking place in

(Wayman—from page 187)

SOME RESULTS OF TEAM WORK

As a result of their efforts, former vocational agriculture teachers are now serving, or have served, throughout the nation in responsible positions in agricultural education and in other educational and agricultural positions. Twelve have served as supervisors in the state office with three of these now serving in the U.S. Office of Education. Nine have served as teacher educators; six of these in five states other than West Virginia.

Eighteen individuals have served as county or regional vocational supervisors with four of these in four other states. Eleven are serving in other educational positions, twelve in agricultural and three in non-agricultural positions. Of the sixty-three listed above, twenty-seven have completed a doctorate degree.

Mr. Lowe and Dr. Parsons served a total of 70 years in agricultural education prior to their retirements in 1957 and 1951, respectively. Since then they have attended most of the state vocational agriculture teacher conferences and have displayed a keen interest in

their areas of concern and with the opinions of various study groups as to the education in the sciences needed by their students over the next decades, and (2) to inform biologists of the needs of students in agriculture and natural resources, for their consideration in planning core curricula and service courses."

Abstracts of major presentations included in the manuscript reveal anticipated trends in the curricula of the agricultural, renewable natural resources, biological, physical, mathematical and social sciences. Viewpoints the junior college and industrial sector were also presented. The appendixes contain summarized recommendations of the discussion groups on matters of curriculum planning.

Curriculum planners in agriculture and renewable natural resources sciences at the junior college and university levels may find this publication useful in assessing trends and in making curricular design decisions. This book appears to be unsuitable for use as a course text, but may provide some value as supplementary reading material for advanced degree candidates and junior college or university faculty members concerned with curricular design.

*Commission on Education in Agriculture and Natural Resources, 1967. *Undergraduate Education in the Biological Sciences for Students in Agriculture and Natural Resources*. Publ. 1495, National Academy of Sciences, Washington, D.C. 86 p.

Vanik S. Eaddy
Auburn University

APPROVED PRACTICES IN SWINE PRODUCTION, By Baker and Juergenson, The Interstate Print-

vocational education. Both men became charter members of the National FFA Alumni Association showing their continued interest and support of vocational education and the FFA.

This writer has been associated with these two men for nearly fifty years and can truly testify that their teamwork and wholesome influence in working with many students and teachers has enriched vocational programs, not only in the state, but throughout the nation. They can truly be called the two early pioneers in agricultural education in West Virginia. ♦♦♦

(Robertson—from page 188)

Vo-ag teachers could compare scores on vocational interest tests such as OVIS with occupational plans of present Vo-ag students. The teacher might ask himself: "Do students enrolled in Vo-ag desire a career in agriculture?" or "Are most of the students in this school who are interested in agricultural occupations enrolled in Vo-ag?"

The career curricula of the schools in the study included few offerings other than agriculture. Students had little opportunity to enter training for

and Publishers, Danville, Illinois, 1971.

The authors state in the preface of the text, "The purpose of this book is to furnish a comprehensive list of activities in swine production which involve approved practices with information as to how they should be performed." They later re-emphasize the "more important activities involving approved practices" and the "how" of each activity. With this purpose and procedure, the book necessarily becomes a cookbook of the most commonly recommended "approved practices for swine."

There is a general bibliography at the end of the book as well as footnotes in many chapters. The advanced swine producer could perhaps benefit from a bibliography at the end of each chapter.

The "Glossary of Swine Terms" with only 106 terms included, appears rather brief for an introductory book. The index is quite comprehensive although it could be criticized for not identifying all the words in the glossary. Consequently younger students may experience some difficulty in using the book as a reference for vocabulary development.

Summary: The book does an excellent job of achieving its stated purpose: that being to provide the swine producer with a series of "how to do" approved practices for swine production. As such, the book will lead itself well to introductory classes of swine production at the High School level.

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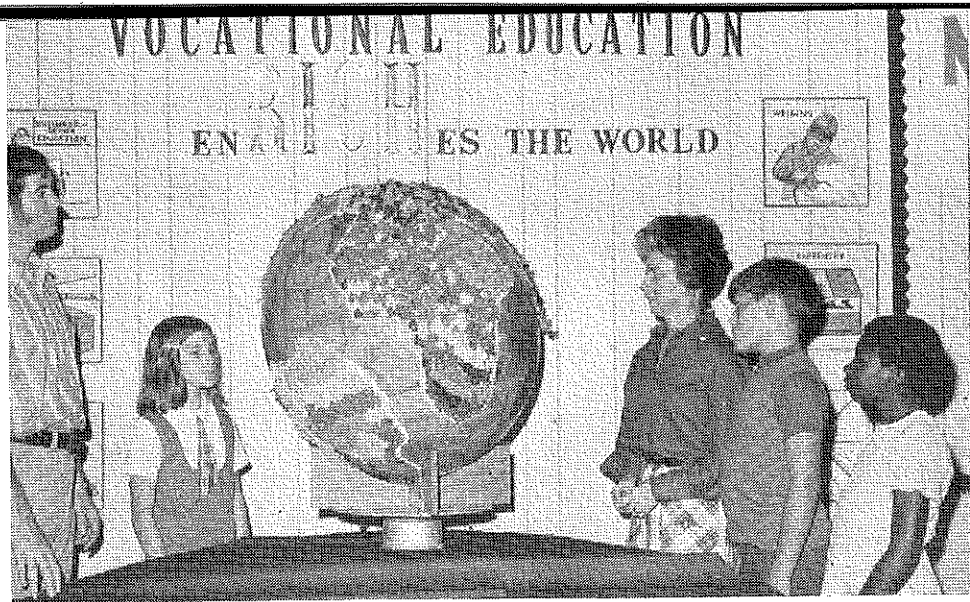
the occupation of their choice within the limited vocational offerings in these schools. If students are to have the opportunity to receive the education needed to enter the occupation of their choice, teachers of vocational agriculture will need to encourage the expansion of all types of career education. ♦

1. Clark, Raymond G., et al., *Career Opportunities*, Department of Secondary Education and Curriculum Research and Development Program in Vocational-Technical Education (Michigan State University, June, 1969).

(Jones—from page 189)

courses available to them. The demand for farm workers seemed to be quite good as almost every newspaper indicated a farmer had expressed a desire to hire another helper if he could find one. A good single farm worker could expect to receive about \$250.00 per month, room and board, plus various other added extras.

The New Zealand farmers have similar problems that American farmers have. They are very friendly towards America as they would like to sell us more of their products. Farmers, or "cockies" as they are called in New Zealand, are very highly respected in their country. We felt that farming was about the most highly respected profession in New Zealand. ♦♦♦



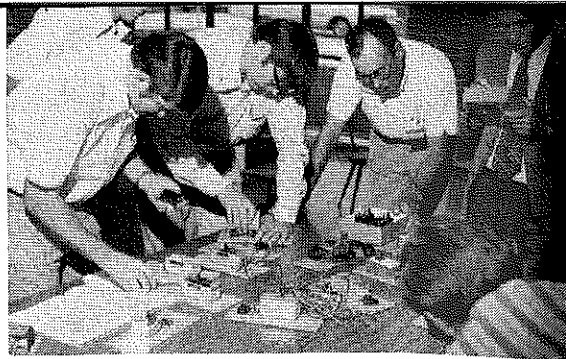
Career Awareness Promoted — McAdory, Alabama, Agribusiness Education Teacher Don Bristow, left, and elementary students Rhonda Moore, Vinson Ryals, and Anthony Price, listen as a Birmingham area vocational teacher explains careers in vocational education that enrich the well being of citizens, world-wide. (Photo supplied by Cecil Gant, Public Information Specialist, Auburn University).

Stories in Pictures

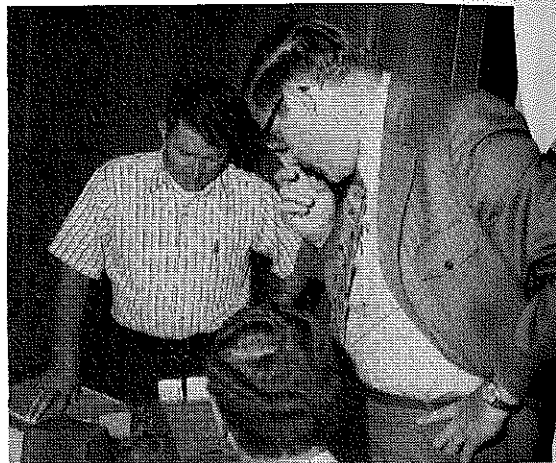
by Richard Douglass



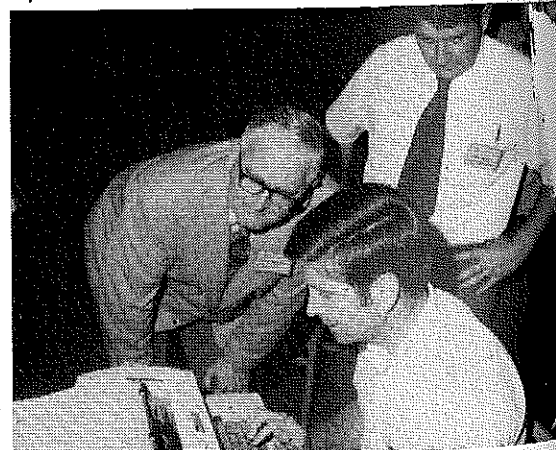
Meaningful Exploratory Career Education — Charles Elkins, Vocational Agriculture Teacher at Broadmoor Jr. High School in Baton Rouge, Louisiana instructs students in Ornamental Horticulture. This is one of the most popular departments in this urban school. (Photo supplied by J. C. Simmons, Assistant State Supervisor, Vocational Agriculture).



Teachers also Learn by Doing — Saving Labor with Electrical Controls is a part of many Vo-Ag Courses. These Nebraska Teachers are checking themselves out on a Kit of Electrical Controls. Six kits were made available by the Nebraska Inter-Industry Electrical Council and the Ag. Eng. Dept. Power use advisors across the State help move the kit between teachers and serve as consultants when necessary. Coordination, testing materials and use instructions are provided by Ag. Ed. Dept. Original kit design provided by University of Minnesota, Department of Engineering. For more details see December 1967 *Ag. Ed. Magazine*, pp. 137. (Photo supplied by Richard Bringelson — Coordinator of In-Service Agricultural Teacher Education).



Teacher Educators Study the role of Computers in Agriculture. John Thompson, Ag and Extension Education, Wisconsin, above, reviews the capabilities of the talking computer. The touch-tone telephone conversation with the computer was demonstrated by Dr. Stephen B. Harsh, Ag. Econ., Michigan State. Below, Dr. Ben Byler, Ag. Ed., Iowa State, tries his hand at outwitting the computer in a "Moon Lander" simulation. The cheering section includes Dr. Frank Baker, Ani. Sci., University of Nebraska and Gary McVey, Mech. Ag., South Dakota State University (Photo by Richard Douglass).

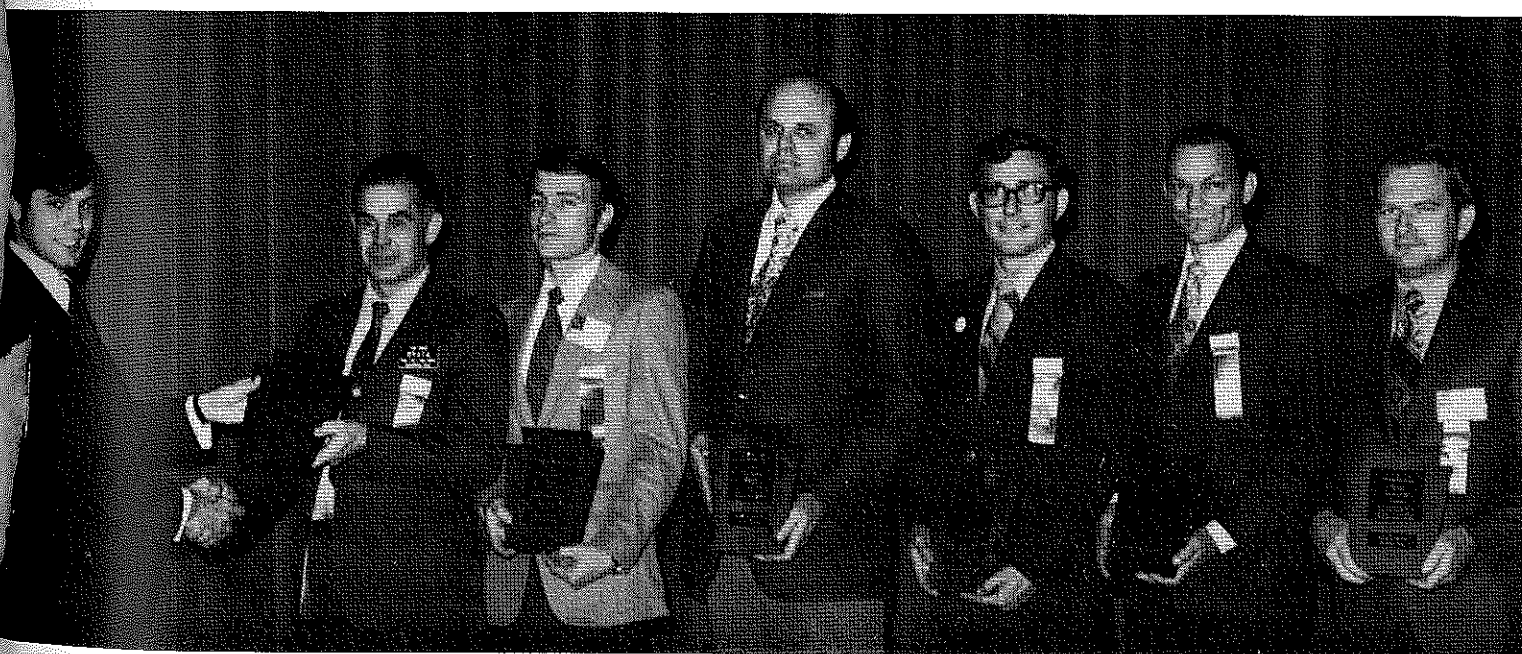


Volume 45

Agricultural Education

March, 1973

Number 9



Theme—
**CAREER EDUCATION:
SECONDARY SCHOOL VISION**