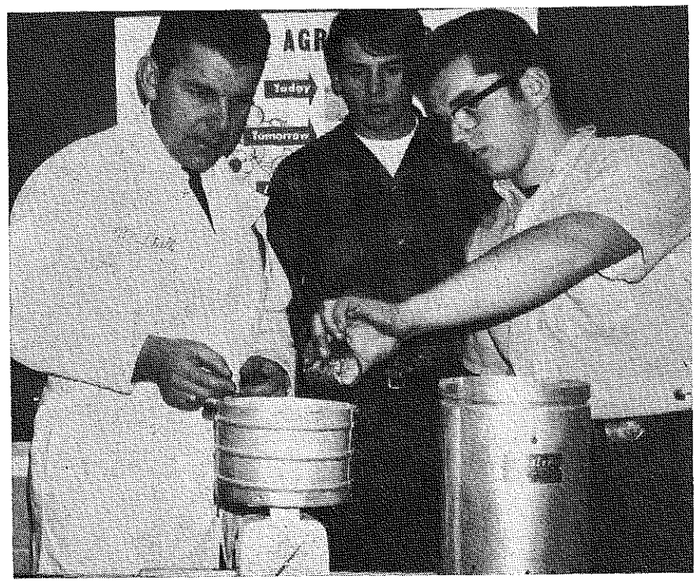
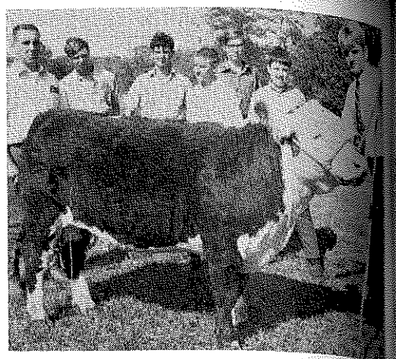
Stories in Pictures

ROBERT W. WALKER
University of Illinois

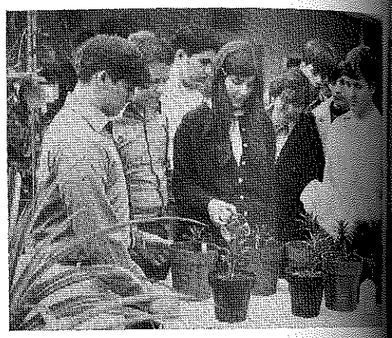


Students at Walkersville High School, Maryland checking shelled corn samples for moisture. The vocational agriculture instructor, Paul Stull, explains the need for proper moisture in grain to insure quality harvesting and storage. (Photo by James Pope, Maryland Department of Education)

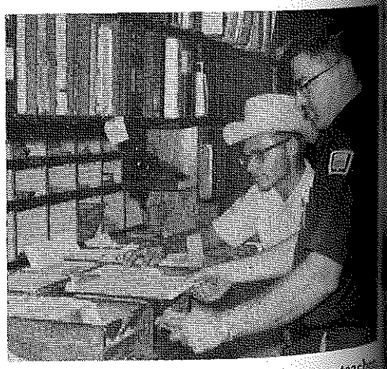
This six-man committee met at the National FFA Center in Alexandria, Virginia, to discuss changes in the FFA *National Chapter Award Program.* Standing, left to right: Dennis W. Torrence, Vocational Agriculture Instructor, Appomattox, Virginia; Harry Schnieber, Vocational Agriculture Instructor, Belvidere, New Jersey, and Paul Day, State Supervisor, Agricultural Education, State Department of Education, St. Paul, Minnesota. Seated, left to right: Harold W. Sullivan, Program Specialist, Vocational Agriculture, State Department of Education, Charleston, West Virginia; Billy L. Conner, State FFA Executive Secretary, Texas Education Agency, State Board of Education, Austin, Texas, and Clifford L. Nelson, Associate Professor, Department of Agricultural & Extension Education, University of Maryland, College Park, Maryland. (Photo from The National FFA Center)



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



Horticultural students experiment on Easter lilies using the chemical, phosfan, as a height retardant. (Photo by C. C. Beam, Vocational Horticulture Instructor, Herndon, Virginia)



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

Agricultural Education

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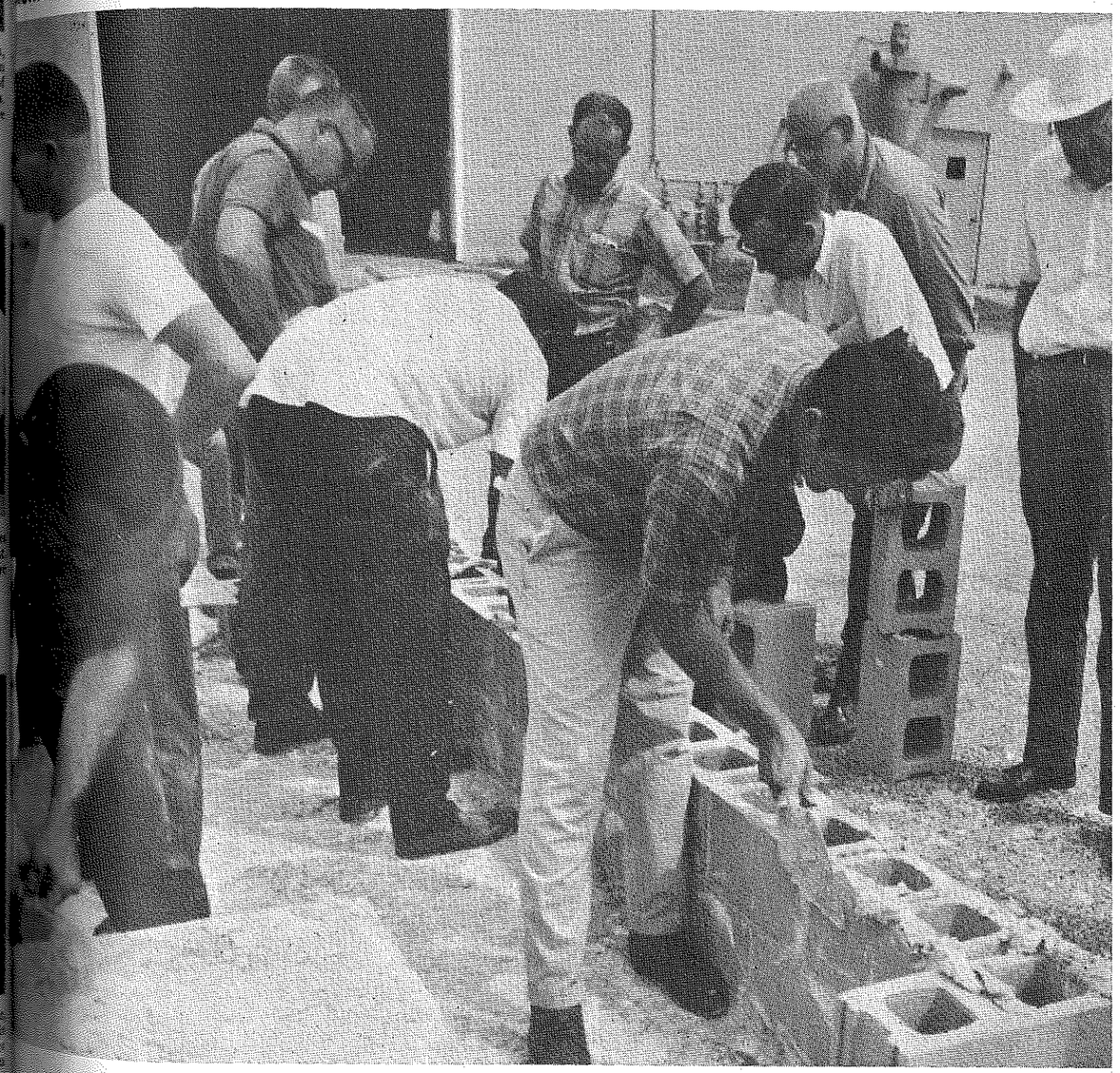

Featuring —
PROFESSIONAL IMPROVEMENT

The
Agricultural Education
Magazine

EDPRESS Vol. 43 May 1971 No. 11

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THE AGRICULTURAL EDUCATION MAGAZINE is the monthly professional journal of agricultural education. The publication is managed by an Editing-Managing Board and is printed at The Lawhead Press, Inc., 900 East State Street, Athens, Ohio 45701.

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COVER PICTURE

Concrete workshops which are sponsored jointly by the Portland Cement Association, the Wisconsin Concrete Products Association and the Wisconsin Supervisory Staff in Agricultural Education, provide continuing opportunities for agricultural instructors to improve their competencies for effective teaching in this area of instruction. (Photo from Dale C. Aebischer, Head State Supervisor of Agricultural Education, Wisconsin).

From the Editor . . .

PROFESSIONAL IMPROVEMENT


Harry W. Kitts

Are we moving too slowly in agricultural education? Continuing graduate study toward a Master's degree is the common concept of professional improvement for many teachers. Others think of attendance at a yearly teacher's conference or an off-campus workshop as professional improvement.

Agriculture is a viable subject. Course content should be constantly evaluated, up-dated and revised. Teachers cannot continue to present the information they received in their undergraduate training perhaps as recent as three or five years previously. Where can the teacher secure new information? He must have in-service training.

Many industries and businesses keep their employees up-to-date by providing workshops, clinics or training sessions within their own organization. Perhaps you are most familiar with the local automobile dealer who sends his mechanic to a training center each year to learn about the new models being introduced. Businesses, especially agricultural machinery, chemicals, feeds, fertilizers, and electrical power companies, frequently provide personnel and equipment to present technical information needed by teachers of agriculture for up-grading, retraining or acquiring knowledge.

Travel is another method of professional improvement. One commercial company has sponsored educational tours for agriculture teachers to observe agricultural production in various sections of the United States. The president of NVATA was a member of a group which toured a section of Europe last summer. Several teachers have accompanied FFA members on trips to Europe, South America and Asia. How many teachers have arranged educational trips on a more limited scope as part of their professional improvement? Have you visited the Agricultural Experiment Station in your own, or adjacent, state recently? When was your most recent visit to a research farm operated by a feed manufacturing company? Did you participate in the tour of local industry conducted by the Chamber of Commerce to better comprehend the activities of the agri-related businesses of your community?

Teacher training institutions must realize that teachers need courses in areas other than methodology, philosophy and evaluation of vocational agriculture. Other departments, such as soils, animal and plant science, horticulture and entomology, should provide instruction during the summer session, or at other convenient times, to provide teachers the desired technical information. All of the material need not be for graduate credit nor organized into modules applicable to an advanced degree. The attainment of an advanced degree in Agricultural Education may not provide the professional improvement needed by many teachers to meet present day demands. The new developments in plant breeding or building construction techniques may be far more valuable.

Workshops, clinics or off-campus courses are another source for professional improvement. Again, the emphasis should be to meet the needs of the individual rather than adherence to requirements for graduate credits for an advanced degree. These workshops, clinics or off-campus courses should be offered at a time of day when teachers are free to attend. They should be presented at locations which minimize the amount of travel required. They should be organized so the cost of attendance or participation does not prevent anyone from participation who desires.

Supervisors, or consultants, in the State Department of Education have a responsibility for professional improvement of teachers under their direction. Many of these State personnel may not be qualified to provide the desired technical training, however, they can make the initial contacts, the necessary arrangements perhaps including some financing, and organize experiences such as described in articles in this issue for teachers in Louisiana and New York.

As teachers slowly alter their programs to include more than production agriculture, teacher educators, deans of teacher training institutions, and state supervisory staff must modify existing programs to meet the demands for new skills, for teaching materials and methods of presentation.

Dr. Al Donahoo, Executive Secretary of the Minneapolis Grain Exchange, at a Curriculum Workshop in Bismarck, North Dakota in March 1969 stated that many vocational agriculture instructors were sluggish in up-dating their curriculum, especially in the inclusion of agri-business, because of:

1. Lack of experience in agri-business, and consequently lack of familiarity with problems in agri-business, compared to experience in production agriculture.
2. Delay in changing the pre-service teacher education curriculum to prepare individuals to teach such material.
3. Failure to provide in-service experiences to enable teachers to secure information not available to them in their pre-service training.

These omissions result in shallow teaching. They also result in the teachings of some teachers of agriculture not being current with the techniques used by the progressive farmers and industry. Lack of knowledge and experience also results in many students today not receiving the training needed because teachers of agriculture have not broadened their curriculum beyond the narrow concept of production agriculture.

An industry that does not keep up-to-date frequently goes out of business due to competition. Seldom does one hear of a teacher of vocational agriculture being released from his position for failure to remain current with developments. Perhaps the profession would be improved if we could identify the 'model in production' by a teacher in his classroom. If such were possible, teachers might be forced to alter their teaching methods and the information presented. Professional improvement is a must! Fortunately, the leaders in our profession have sought this training on a voluntary basis rather than being forced by legislation or competition. Teachers need the assistance of their leaders today to receive this professional improvement. Why are we slow in providing it?

INSERVICE TEACHER EDUCATION

William H. Annis, Chairman
Occupational Education Program
University of New Hampshire
Durham, New Hampshire

The importance of a continuing in-service teacher education program cannot be overemphasized. The best of pre-service teacher education programs can not adequately prepare its graduates for all the situations they will encounter in that first year of teaching. Historically, teacher education departments have concerned themselves with the pre-service and graduate phases of their programs. After all, as academicians, they were evaluated by their peers on the basis of resident instruction and published research with little or no concern or credit for efforts to assist the practitioner in the field. Yet, teacher educators in agriculture were concerned about the practitioner and developed programs of in-service education which were concerned with the beginning and/or returning teacher as well as the experienced teacher.

Prior to the passage of the Vocational Education Act of 1963, this concern could be translated into courses and workshops dealing with either professional education or production agriculture. Multiple teacher departments of vocational agriculture were the exception and one man could supposedly be competent to teach the range of production agriculture from apples to zymolysis, including all areas of agricultural mechanics. Anything pertaining to making a beginning and advancement *in farming* was fair game for the vocational agriculture teacher. Through natural selection, the agricultural teachers found positions in geographical areas where the agriculture emphasized their particular technical competence.

Generally, the in-service education problems were solved in this era by credit courses for the beginning and returning teacher and non-credit workshop type programs for the experienced teacher. If the experienced teacher wanted a master's degree, summer session courses in both professional education and technical agriculture were available. Small states who could not afford to offer graduate programs for their teachers of agriculture generally recommended a nearby state.

When President Johnson signed the Vocational Education Act of 1963, agricultural education found itself in a new ball game. To some, the '63 Act meant fulfillment of a belief — to others, it was the death knell of vocational agriculture. Vocational agriculture no longer was just training for farming; but included other areas of specialization related to farming. This new emphasis of specialization in the program had its effect in the in-service teacher education program. As teachers started to specialize, workshop attendance dropped due to the varied interests of the teachers. Evening extension course enrollment in professional education began to include teachers from all areas of vocational education. Teacher educators began to discover that many of the in-service needs of teachers of vocational education were similar. To meet this challenge, some teacher educators' reaction was to change courses to meet these needs. Others continued to serve only the field of vocational agriculture.

This is the position we find ourselves in today. In some states there exists vocational teacher education departments made up of two or more fields of vocational education. In other states, separate institutions are responsible for vocational teacher education. What direction can one provide to assist in this dilemma? We are in an excellent position to assist vocational-technical teacher education in all fields. By utilizing a systems approach, the following priorities come to the surface:

Organization . . . Teacher education is one area of vocational education where differences among the various services are minimal. In a period of tight money, it behooves each field of service to forget petty jealousies and build on the strengths of the various teacher education programs. To provide the organization necessary, it is suggested that a Coordinator of Professional Development be appointed within the State Department of Education. This appointment could be a multiple appointment making the person who assumes this position a member of each vocational teacher education department in the state. The person in this position would also be responsible for such federal and state monies that are designated for vocational teacher education.

This organization would provide for communications and coordination between the fields of service and teacher education institutions.

Coordination . . . The Coordinator of Professional Development would be in a position to know the needs of teachers as well as the competencies of the various teacher education programs. Utilizing the reports of supervisors, teacher educators, teachers, superintendents and others, he would be aware of the in-service needs of all fields of service and could coordinate an overall in-service program. He could coordinate in-service programs as to subject matter, location, etc. with both teacher education institutions and teachers, thus providing a better program for more teachers.

Policy for the in-service teacher education program must be developed by the teacher educators and the Coordinator of Professional Development to meet the unique needs of each state and teacher education institutions therein. Such policy must define both roles and responsibilities of the teacher education staffs and the Coordinator of Professional Development for in-service education.

Adaptation . . . Since the field of Agri-Business and Natural Resources has become diverse with more and more specialization, it is necessary for teacher educators to take a critical look at the course content, and the manner in which this content is offered to teachers on an in-service basis. If one bases the content for courses on the needs of teachers, we find some of each course irrelevant to various groups in the class.

Courses traditionally have been developed around the Carnegie unit, with each course made up of units of instruction which are concerned with a central theme. This procedure works well for the teacher; however, if we really believe in meeting the changing needs of our in-service clientele, we must think of a modular approach which would provide short term units which meet these in-service needs. For example, teachers in vocational education in agriculture as well as other teachers in vocational education, need to develop competency in a systems approach to planning. (This unit is normally taught in a supervision and administration course.) I question the need for these same teachers to be required to sit through the complete course in supervision and administration just to receive this unit. The modular approach would allow all vocational teachers to participate in those instructional areas of need and not be required to complete a Carnegie unit credit course. Naturally there is fragmentation of the old course concept; however, if people can feel that their needs are being met, they will continue to progress and become better teachers. This approach of short units does away with the commitment for a full semester or quarter which is required for a full course and thus would help obtain higher enrollments. Modules could also, under the guidance of a graduate committee, be utilized as a part of the requirements for an undergraduate or master's degree.

The approach suggested in this article is not original with the author, nor will it work totally for all situations. It is an approach which will work in some states and provide worthwhile coordinated in-service teacher education to vocational-technical education in all fields of service.

S. P. O.

E. L. Bosomworth
Past President, IAVAT
Olney, Illinois

Do you really believe in the professional organizations in which you hold membership? Do you support them in your conversations with fellow teachers and encourage their membership and support of your professional organizations? You can do it and at the same time dress up your school office with a conversation piece — one which will give you an added opportunity to speak up for your organizations.

Here is how.

1. Make a paddle similar to the fraternity paddle you have often seen. Choose a size according to your needs; a paddle four and one-half inches wide and about twenty inches long may be about right. Shape from a suitable wood and sand until perfectly smooth.

2. Secure the decals, stickers, or emblems which represent your membership in professional organizations. Most organizations will have these, if only on a letterhead. If they do not, make a contribution to that organization by encouraging them to develop one.

3. Having chosen the emblems which represent your professional organizations, glue them to the paddle. Smooth with a rolling pin or other suitable device, working out any air bubbles that may be present. When the glue has dried apply varnish.

4. For best results in finishing use a decoupage effect. To do this, use a decoupage varnish and apply several coats at 24 hour intervals, sanding lightly between applications. One can stop with a few coats, but 15 or 20 gives the emblems the appearance of being a part of the wood.

5. For an added effect, you may wish to place the letters S—P—O on the handle. The letters cause people to inquire, giving you the opportunity to start a conversation in support of your professional organizations.

What do the letters S—P—O stand for? — Support Professional Organizations!

The author holding his S.P.O. emblem.

INTERNSHIP IN OFF-FARM AGRICULTURE

T. S. Colvin, Director of Vocational Agriculture
State Department of Education
Baton Rouge, Louisiana

The experience of seventeen Louisiana vo-ag teachers who participated in the three-week summer 1970 "Internship" indicates that the program offers promise as a means of in-service training on a short-term basis. Four of the teachers were placed with farm machinery and equipment dealers and thirteen with wood-using or forest industries.

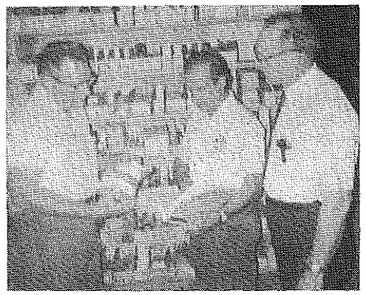
Thirty-one Louisiana vo-ag departments conducted programs in Copperative Agricultural Education of various types in the school year 1969-70. This was the first experience in a Cooperative Program for many of the teachers. Through supervisory visits by supervisors and teacher trainers, it became evident that the average vo-ag teacher would need to acquire some new competencies in order to provide the guidance, counseling, and subject matter needed by Co-op students. In staff meetings during the year, consideration was given to several plans for workshops or institutes. It was finally decided that a program which would involve vocational agriculture teachers in active participation in agricultural business and industry could provide the most effective type of training. The program is now referred to as an Internship in Off-Farm Agriculture.

The interns were enrolled for three hours credit in the LSU Graduate School except for two who had registration difficulties. These two were permitted to participate in all activities with the other teachers. Arrangements were made to permit teachers to be away from their regular duties for three weeks. Most of the local school administrators were enthusiastic about the program and some insisted that beginning teachers enroll in the course as a prerequisite for employment.

Planning was begun for the program in January and it was expected that this would be ample time to prepare for the internships to begin around June 15th. Subsequent events proved, however, that this was barely enough time to make the necessary arrangements between the schools, the University, the teachers and the business firms involved.

In a meeting of the State Supervisory Staff and Teacher Trainers from the four teacher training institutions, it was decided that the teachers would devote full time to the course, eight hours per day for three weeks. During this first year, enrollment would be limited to those teachers who desired to enroll for training in one of the wood-using industries or with farm machinery and equipment dealers. These two groups each have a statewide association with an executive secretary who was available for assistance in the program. The executive secretaries served as the liaison in planning details and in coordinating activities of their groups.

The first step was to contact the executive secretaries of the Louisiana Forestry Association and the Deep South Farm Power and Equipment Dealers to explain the program. LSU staff members later met with the executive committees of the associations to present the plan for the internship. They were given a friendly hearing by members of both boards and an agreement was reached to proceed with the internship for the summer of 1970.



Getting acquainted with the parts department at a farm implement dealership.

Area Supervisors of Vocational Agriculture assumed the responsibility for contacting interested vo-ag teachers and obtained an agreement from each of them to participate in the internship program. A meeting in mid-June included all prospective enrollees, a representative from most of the business firms who had agreed to cooperate and members of the LSU staff and the State Supervisory staff in Vocational Agriculture. During this meeting, the LSU staff presented an outline of the training program for each of the two groups along with guidelines which would be followed throughout the training period. Major objectives of the internship would be to acquaint the teacher with job titles and job descriptions to be found in the industry or business of his choice and to acquaint him with the knowledge and skills which are involved in many of these jobs.

Final plans were made at this meeting for the date, time and place for each trainee to meet the representative from the business firm in which he would work during the internship. A requirement of the course was for each teacher to submit a paper at the end of the three-week period describing the activities in which he participated as an internee and to obtain a list of job titles and descriptions including hourly wage rates and working conditions wherever possible.

Participating teachers enjoyed a wide variety of experiences both in farm machinery equipment and the wood-using industries. One experienced teacher who was placed in a tractor and equipment company asked to be included in every possible activity during training. He performed the duties required of a machinery parts helper or clerk, a farm machinery mechanics helper, a farm machinery mechanic, a farm machinery parts manager and the foreman. He also worked with the tractor equipment and sales manager and had interviews with the general sales manager who described for him the duties performed by various employees, the characteristics of the individual he seeks for employment and information concerning the operation of the business on a day to day basis.

The teacher feels that he will be in a better position to conduct a cooperative program after participating in the wealth of experiences. By having firsthand knowledge of what goes on in the work world the teacher no longer must guess at what should be included in his teaching program. He can identify the skills that are most valuable to a student entering a particular occupation. Also, he can emphasize the attitudes that a student should possess and the social behavior pattern that a student must develop if he is to make a start and advance on a job.

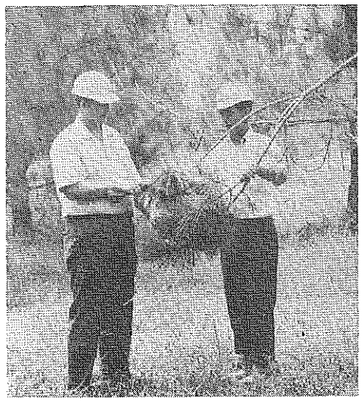
Most of the wood-using industries involved in the internship were large corporations with holdings throughout the United States and Canada. A typical first day for the teacher serving his internship with one of these firms included an interview with the head of the organization, a highly paid executive, who expressed his interest in the program by spending ten or fifteen minutes with the teacher and the individual to whom he has been assigned.

The teacher was accompanied by someone from the company at all times, usually a professional forester. Each firm had the activities for every day planned in considerable detail including trips to wood-land operations or other mills and plants in the State. Occasionally the day's plans included travel of 200 or so miles to visit company operations in distant parts of the State and return to home base.

The internship usually included two or three days at a paper-mill rotating from one department to another in order to get an impression of the type of work performed in each. This was followed by trips to a wood yard to observe the equipment used to handle pulpwood and route it into the mill. During these activities, there was little active participation on the part of the teacher. He was there as an observer only, but later was given job descriptions involved in each operation. The remainder of the time was spent observing and participating in various types of wood-land operations. Most of the trainees experienced tree marking, used a tree deadener, operated a log loader, and some used a chain saw for the first time. Most of the internees feel that they now can teach the skills involved in marking timber for thinning, cruising timber and can recognize and identify different species with considerably more confidence.

No further group meetings were held with the teachers after they reported to the company for training. An LSU representative visited each firm at least once during the training program and on several occasions visited teachers "on the job." The Area Supervisor visited his teachers at least once and the writer visited three of the firms involved to observe teachers' activities.

An important fact regarding the attitude of industry toward working with the teachers was revealed when the firms devoted as much time and effort to one trainee as they did later to a group of three or four teachers. In several instances, only one teacher was assigned to a company and in others only two were assigned. However, their experiences were as varied and extended over the same period of time as the larger groups.



A trainee and the supervisor at a tree improvement center examine new pine cones on six-year old grafted stock. Purpose of the center is to improve quality of trees, improve tree growth and determine better methods of regeneration.

Top level management has taken an active interest in the internships. One firm flew in their President and Vice-President from another State to be present for the final interview with the teachers assigned to their company. All of the firms involved have offered their full cooperation for the continuation of the program. Most have offered to increase the number of teachers they will accept for training.

William J. Dodd, State Superintendent of Education, who has been a strong advocate of cooperation between the business world and education, praised the Internship Program as a practical approach to the in-service training of teachers of Vocational Agriculture. Superintendent Dodd said, "The Off-Farm Agricultural Business Community is favorably impressed with the fact that this is an action program which they can see and appreciate. They regard it as a progressive step which will provide immediate benefits to the school and its students."

Other benefits for Vocational Agriculture accrue in a program of this type. These firms are hopeful that long range benefits will be noticeable in their own company operations in the way of improved community relationships and possibly through better prepared prospective employees from the local school system. Another benefit worth noting is the fact that supervisory staff members and University personnel have an opportunity to meet with upper echelon executives and others for an exchange of ideas. They are able to give these people a better understanding of our program and its objectives especially as it affects the agri-business community. These contacts may be important in the future in providing support for Vocational Education where needed.

Tentative plans for 1971 call for an expansion of the program into other types of Off-Farm Agriculture such as Ornamental Horticulture, Meat Merchandising and Farm Services. It is expected that enrollment will be considerably larger when these options are made available.

EFFECT OF SUMMER ACTIVITIES ON VOCATIONAL AGRICULTURE PROGRAMS

Robert J. Ford, Chief
Elementary and Secondary Career Education Section
Area Schools and Career Education Branch
State Department of Public Instruction
Des Moines, Iowa

and

Clarence E. Bundy, Chairman
Department of Agricultural Education
Iowa State University
Ames, Iowa

As changes occur in our educational systems and in agricultural technology, questions have been raised regarding continuing emphasis on the summer phase of vocational agriculture programs. These concerns prompted a study[1] to determine the relation between the summer phase and the total programs of vocational agriculture. A five-point rating scale (5-4-3-2-1) based on two sets of criteria was used to make the comparisons. All vocational agriculture departments in Iowa where no teacher change occurred during the summer of 1969 participated in this study.

Seventy-three per cent of the departments which were rated highest on summer programs were also rated highest on the total program. Nearly 90% of the departments rated lowest on summer programs were also rated lowest on total program effectiveness. It was found that enrollments in day school and adult farmer programs increased as the summer program rating increased. The data revealed that summer program effectiveness was a reliable predictor of total program effectiveness and is an important and integral phase of a total program of vocational agriculture and agribusiness education.

Another objective was to determine whether the summer program was positively affected by specific educational factors and activities used by teachers in conducting programs of vocational agriculture. The factors and activities, in order of the degree to which they were positively correlated with summer program rating are:

1. Total number of farm visits made by the instructor
2. Miles traveled by the instructor during the summer
3. Number of Iowa Farmer degrees attained by students
4. Total farm visits made in summer
5. Number of exhibitors at shows
6. Total dollars of labor income earned by students
7. Number of news items and public relations activities
8. Number of participants in speaking contests
9. Day school enrollment
10. Number of educational field trips taken
11. Number of exhibitors at state fair

It is apparent from data in Table 1 that farm visits for on-the-farm instructional purposes are essential. It is the opinion of the authors that a minimum goal of four visits per student per year, and preferably six, is desirable. If the visits are well spaced, it would mean only one visit per quarter (3 months) or 12 in the four years a student is enrolled in vocational agriculture. These visits would provide needed individualized instruction in an age when individualized instruction is being emphasized in all areas of education, not in vocational education alone.

The high correlation between summer program rating and dollars of labor income earned by students revealed by data in Table 2 indicates the importance of summer activities of the instructor and the occupational experience and farming programs of the students. The impact of a vocational agriculture department upon the economic progress of the community should not be ignored when evaluating program effectiveness.

TABLE 1

Average Number of Farm Visits per Department

Departments	*Annual*	*Summer*
Upper 40%	377	185
Lower 40%	201	105

TABLE 2

Added Wealth to Communities From Supervised Experience and Farming Programs
Dollars Labor Income

Summer Program Rating	*No. of Depts.*	*Ave. $/Dept.*	*Ave. $/Student*
5	37	$33,058	$612
4	37	27,989	481
3	37	21,398	480
2	37	19,570	419
1	37	13,601	355

Analysis of the variables affecting summer programs revealed that programs rated 5 compared to programs rated 1, resulted in the following:

- 7 times as many exhibitors at the state fair
- 6 times as many Iowa Farmers
- 3 times the number of students placed for agribusiness employment experience
- 2.5 times as much new wealth into the community as a result of supervised experience programs
- 2 times the dollar labor income per student
- 2 times as many field trips and tours
- 2 times as many judging teams
- 2 times as many speakers trained
- 2 times as many exhibitors at shows

Evaluation and accountability are increasingly important terms in all areas of education today. The factors above, which are highly correlated with summer program and total program ratings, should be used by instructors as a basis for evaluation of self and program effectiveness.

A critical self-evaluation will help instructors place proper emphasis on priority activities and techniques in a practical educational program. Many instructors get involved in routine and repeat activities which are comfortable and of interest to them, and neglect activities more important to the development of those people whom they are hired to serve.

It was found that summer school attendance did not significantly affect the number of summer farm visits made nor the summer program rating. This supports findings of Koene of Wisconsin, who found that the instructors who attended summer school continued to conduct a vigorous summer program even though some weeks were spent out of their communities.

Conclusions

1. A summer program should be developed and an itinerary submitted weekly to administrators.

2. The vocational agriculture instructor must schedule activities and use his time in the summer as carefully as he does during the regular school term, even though it may be less highly structured.

3. Twelve-month employment and a carefully planned summer program are necessary.

4. Individualized instruction is important during the summer but group activities for FFA, young farmers and adult farmers should not be neglected.

5. FFA activities should be stressed as an integral part of the vocational agriculture program to capitalize on the inherent motivational values.

6. Year-around adult and young farmer programs are an integral part of the total agricultural education program in the community. They help keep instructors up-to-date on changing technology in agriculture.

7. Vocational agriculture personnel should cooperate with other community and agricultural agencies in maximizing use of community resources in conducting an effective summer and total agricultural education program.

[1]This article is based on a M.S. thesis by Robert J. Ford entitled: "Relation of Summer Programs to Total Programs of Vocational Agriculture in Iowa."

TEACHER EXCHANGE PROGRAM

George W. Keller
Vocational Agriculture Instructor
Canajoharie, New York

Perhaps the best way to start this report would be to give a brief idea of the things that I did for the six weeks Teacher Exchange Program. I was placed with Dairylea Cooperative, Inc. All of my activities were under the direction of the division manager.

The first week I attended the Pennsylvania Association of Farm Cooperatives 1970 Summer Institute at Bloomsburg State College with 18 young people selected by various New York State cooperatives. Dairylea was represented by several youths. One of the young people selected by me, won an expense paid trip to the American Institute of Cooperation at Ohio State University. The Institute assists youth to develop knowledge and understanding of cooperative businesses serving the area.

The objectives of the Institute are:

a. to develop the interests of youth leaders in the future of farmer cooperatives in their own community.
b. to assist in the training of young people for leadership roles in agriculture, in cooperatives and in other community programs.

The second week was spent between the Young Cooperator's conference at Morrisville Agricultural and Technical College, the bulk tank truck driver, and a dairy service man.

The third week was spent in the milk plant and ice cream plant in the city of Utica, New York.

The fourth week was at the Vernon plant of Dairylea where I had the opportunity to work with a dairy service man, one of their contract bulk tank truck operators, and the manager of the new soft milk products plant who was in the process of hiring a staff for this plant.

The fifth week was spent at the Goshen Dairylea milk plant where one

million pounds of milk are bottled each day.

The sixth week was spent with the manager of a county receiving plant at Milford, New York and the Utica area person in charge of Dairylea membership problems.

As you can see, I had a very varied experience in the milk industry. I had the opportunity to observe the job opportunities present in the handling of milk from the farm to the consumer. Also, I was made aware of the problems connected with meeting Public Health regulations, sales, unions and hiring.

I would recommend this type of program for any teacher of agriculture, State Education personnel, guidance teacher and perhaps school administrators. Being able to talk with the people on the job and the people who do the hiring gives a person a completely different outlook on what we should be doing in education and where we have failed to recognize what industry and business want from education. There is a need for communication between the work-a-day world and the educational world. Until educators are willing to sit down and listen we will continue to short change our youth with unrealistic educational programs.

These are the qualifications that the Dairylea Cooperative are looking for when they hire a person:

1. Desire to do a job.
2. Willingness to learn.
3. Willingness to work regardless of the job.
4. Able to get along with other people.
5. Respect for authority.
6. Able to handle the basic 3 R's.

The worth of FFA leadership training was brought forth by management and worker alike. Many in management felt that the FFA was more important in building the right attitudes for their workers than the actual classroom work.

All of the managers were in favor of a strong supervised work experience program in agriculture. Most of them preferred the on-farm type of work experience regardless of the type of work that the person may do in the world of work. They feel that the farm experience gives the person the correct attitudes that are so necessary to be successful no matter what type of job that person seeks after high school.

Most managers preferred a generalized type of agricultural course rather than a specialized type. However, they did want the teaching to be centered around the farm. The one addition to the usual program was the addition of practical bacteriology as related to the farm and the milk industry.

The first and by far the most important use of the results of the program is to get more young people to attend the conferences, meetings and field trips where career ideas are being discussed. We do a lot for the college bound student but very little for the student who needs to have the world of work really made important. The two conferences that I attended with young people were good examples of what can be done. There are many new ideas and methods that I hope to use this year in my classroom as a result of the program.

The man in charge of Quality Control for Dairylea will work with me during the year to help develop a program for students aimed at improving the quality of milk produced on the farm. This will be in the form of exposing the students to poor quality milk and the reasons for it. We hope to develop a program of on-farm instruction so the student is able to recognize poor quality milk in the bulk tank. The producers of milk must be able to understand the reasons why milk does not remain at the same high quality as when produced by a healthy cow.

I hope to work closely with different people who are charged with the setting up of the various programs that our students are exposed to during the year and to correlate this with the local people who feel that the cooperative way is the best way for the farmer to market his products or buy his supplies or services needed. Then I hope to get such persons to invest either time or money in the young people of the area to equip them with the desires and knowledge so that they can better make vocational choices.

There were many learnings because I worked closely with the milk industry. My entire exposure was from the farm point of view. Now I have a more complete picture of the movement of milk through its various routes to the consumer with all of the problems of its many products. I hope that this knowledge will enable me to light a spark so that some of the young people that I come in contact with may find a horizon for their life's work.

It is difficult to put into words what is lacking in the preparation of a teacher in the vocational field. I believe you would call it too much an academic approach that is theoretical and not expected to produce a practical result. As a College President put it this fall to a meeting of entering Freshman and their parents, "Do not expect to have the answers on how to solve the world's problems when you leave college." This type of charge could be put in a high school student's hands.

I believe that our educators who are charged with the preparation of teachers need to expose themselves to the needs of the world of work as it relates to the classroom contact with our young people who have to make these important decisions for a life's work.

It is difficult for me to see or understand why we must have a young person at the tender age of 12 or 14 make up their minds exactly the direction he wishes to go. It is my belief that too many educators desire to take away the pleasures and choices of our young people. They seem to believe that with the "academic" push starting with the space age has really created the ultimate in education. This has been done at the expense of the majority of the student population, who must still find their place in the "sun". The downgrading of vocational education can be seen in practically every school, particularly the basic subjects which support the vocationally oriented young person.

In conclusion, education needs:

A little more kindness and a little less creed;
A little more giving and a little less greed;
A little more smile and a little less frown;
A little less kicking a man when he's down;
A little more laugh and a little less cry;
A lot more "we" and a little less "I".

What I'm saying is, "It's not so important that we always receive recognition for doing a job right, what is more important is that the job is done — RIGHT."

SELF-INSTRUCTIONAL SKILL TRAINING FOR PRESERVICE COORDINATORS

Fred W. Harrington
Division of Vocational Education
Temple University
Philadelphia, Pennsylvania

How many Cooperative Education coordinators actually arrive at their first job with experience in conducting employer interviews? Already you may be checking off the roadblocks that inhibit such preservice experience. Ideally, preservice coordinators can engage in a variety of real employer interviews, but the expense and scheduling problems of such an approach seem insurmountable. Another possibility is for coordinators to role play interview situations. This approach has advantages, but how real is the experience?

In a doctoral study at The Ohio State University, the author developed a self-instructional package to provide preservice coordinators with interviewing skills. This relatively inexpensive self-instructional package combines the use of experienced employers and coordinators, role playing, discrimination training and video recording to simulate an employer interview. Using models and individualized instruction, the package helps to bridge the gap that exists between preservice methods classes and actual on-the-job confrontation with employers. Included in the package are three video tapes and corresponding self-critique forms. The tapes deal respectively with the coordination skills of (1) establishing rapport with an employer, (2) explaining the cooperative education program to an employer, and (3) convincing an employer to provide a training station.

To use the package, a video camera, a microphone, video tapes, a television monitor and two video tape recorders are necessary.

The preservice coordinator begins the program by watching the first video tape of a person who briefly explains the package, the three coordination skills and an interview situation. This introduction is followed by a model interview in which an experienced coordinator is trying to establish rapport with the personnel manager of a large department store.

At the conclusion of the model interview, discrimination training is provided by using flash backs to the model to familiarize the viewer with the good techniques which the coordinator used to establish rapport. The discriminator then introduces a self-critique form which corresponds to the techniques which the model coordinator used in establishing rapport. Typical critique form items are: "Did you cordially greet the employer?" and "Did you listen well?" Each item is followed by rating boxes for unsuccessful, poor, average, good and excellent.

Up to this point, the tape has been only instructional. In order to allow the preservice viewer to apply what he has learned, he is then confronted (on TV) with an actual employer. The employer asks a sequence of questions with each question followed by a 10 to 20 second pause. The preservice viewer video records himself responding to the TV employer. This recording is played back by the viewer and self-critiqued to evaluate his own performance on establishing rapport. If he feels the performance needs improvement, he may review the model interview and/or the discrimination training and record himself again responding to the TV employer. If the viewer is satisfied with his own performance of establishing rapport, he may proceed to the second and third skills.

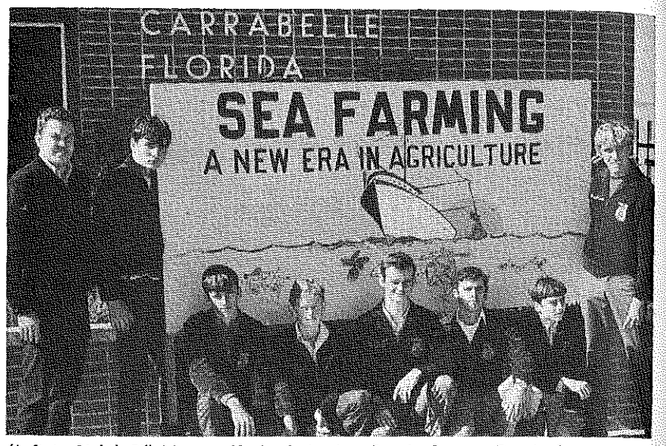
The second and third skills (video tapes two and three) are presented in a similar manner to skill one. For each skill, there is a model interview, discrimination training, an employer question sequence and a critique form.

This self-instructional package proved successful with 22 preservice Distributive Education coordinators at The Ohio State University. Their performance on the coordination skills was improved and their reaction on a post-session opinionnaire was very favorable. Most of the participants in the study reported that they were better prepared to conduct employer-cordinator interviews because of their experience with the videotapes. They felt more confident because they had learned what to say through realistic application and practice of the skills. Simulating a confrontation with an employer was considered feasible and the training program was appraised as being suitable for certain preservice objectives of distributive teacher education. The package may be modified for use in the other vocational service areas.

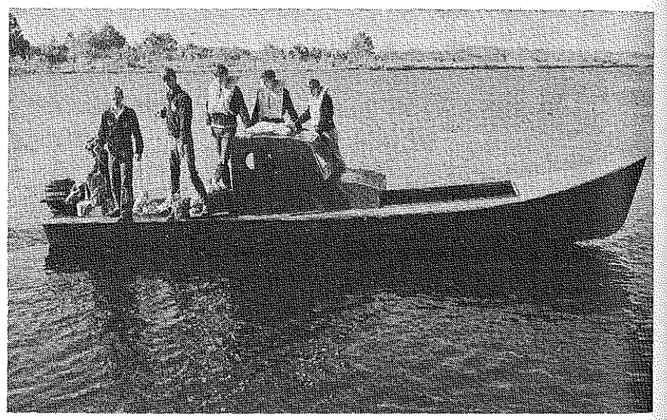
FARMING THE SEA

Florida, a state well-known for its citrus, cattle, forestry and truck farming has initiated a training program in an entirely new dimension —Sea Farming. The pictures accompanying this article, supplied by Joe R. Kirkland, Executive Secretary, Florida FFA, Tallahassee, were submitted as cover pictures for the March issue. Your editor was intrigued by this program and requested this article which describes the program in detail.

William Morgan
Vocational Agriculture Instructor
Carrabelle, Florida



(Left to Right) Bill Morgan, Vo-Ag Instructor; Ronnie Segree; Donnie Segree; Jerry Boatwright; Gene Wilson; Leslie Cain; Rush Marcum; and Mike Cain work in the sea farming program at Carrabelle High School.



Oysters are suspended in wire baskets so students can pull them up and check them for growth. They also take samples for laboratory study. Students painted and outfitted the boat.

The Vocational Agriculture Department at Carrabelle, Florida decided it was time to "plow new ground" as they expanded their curriculum to include sea farming. The economy of the area is oriented to marine activities. State and federal agencies estimate seventy per cent of the economic activity in the Carrabelle-Apalachicola area is attributed to the seafood industry.

Information obtained from a county-wide survey indicated an interest and need by industry for training in the cultivation, processing and marketing of seafoods as well as conservation practices.

Student dropouts were surveyed and many indicated an interest in diesel mechanics and seafood production, processing and marketing.

With the help and advice of interested students enrolled in the Vocational Agriculture program, and an advisory committee composed of representatives from the seafood industry, a program was designed to teach propagation, cultivation, harvesting, marketing and conservation practices related to the production of oysters, shrimp, scallops, crabs and fin fishes.

Objectives of the program are to enable the student to:

(1) Identify and explore the various opportunities in the seafood industry.
(2) Describe the life processes of the commercially important seafood species in the area.
(3) Use up-to-date techniques and methods for cultivating and harvesting oysters, shrimp, scallops and fin fishes.
(4) Navigate safely in coastal waters.
(5) Safely use equipment found in the seafood industry.

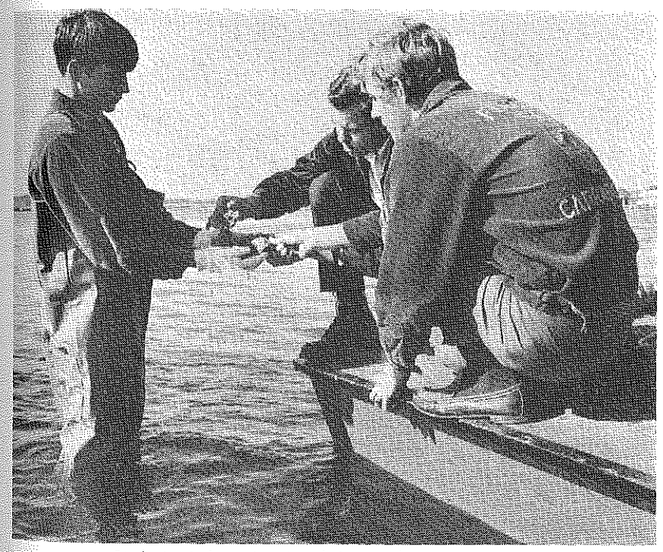
The curriculum is centered around classroom and laboratory instruction with actual handling of various marine species and equipment and application of certain practices in the sea laboratory. Supervised occupational experiences are provided as students gain first-hand knowledge through employment in the seafood industry after school and on weekends.

The course of study includes: basic ecology of the sea, polluting agents, conservation practices and maintenance and upkeep of boats and equipment.

Students learn and practice knowledge in the following categories:

A. Shellfish — Oysters, Clams, Scallops.
   (1) Classification, life cycle, predators
   (2) Harvesting methods, tools and equipment
   (3) Marketing techniques
B. Shrimping.
   (1) Classification, life cycle, predators
   (2) Harvesting methods
   (3) Marketing techniques
   (4) Trends in artificial cultivation and pond culture
C. Fin Fishes.
   (1) Commercial and sport fishing
   (2) Species, habits
D. Navigation in Coastal Waters.
   (1) Knowledge of longitude and latitude and use of navigation equipment
   (2) Safety

A study of an oyster bed at low tide.



Students study oysters for their growth and development.

With a unique combination of marine programs and activities, local and state agency officials are working together to determine the most effective organizational plan to achieve a completely integrated Marine Science curriculum to include Marine mechanics, oceanography and boat building in addition to Sea Farming.

Contact was made with the Florida Board of Conservation and a permit was issued to the agriculture department of Carrabelle High School providing an ocean bottom area containing approximately thirteen acres for the purpose of conducting maricultural experiments with oysters for educational purposes.

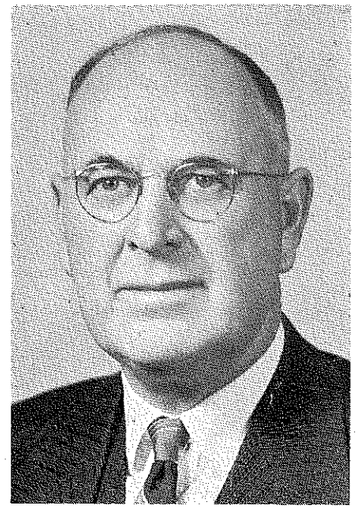
The equipment for the program was purchased with a grant from Federal funds. The equipment list was developed with the assistance of the students and included tongs, nets, baskets, microscopes, safety equipment and an outboard motor. The boat was designed and built locally for the multi-purpose use of oystering, shrimping and fishing.

Students are presently constructing oyster rafts, a relatively new technique in oystering, designed to utilize the vertical as well as the horizontal water columns and to simplify harvesting and increase yield.

A modern indoor laboratory now in the planning stage will enable students to study water samples and marine life to determine the feasibility of "farming" certain water areas. Lab analysis will assist in the study of predators and other organisms and plants.

The program has been well received by students and local industry. It reduces out-migration of students upon graduation from high school, provides better trained personnel for the industry, and motivates some potential dropouts to continue their education.

With world population vastly increasing every day new methods must be discovered in order that the masses can be fed. Since land is in short supply, attention must be turned to the sea. Students in Vocational Agriculture in Carrabelle, Florida are truly plowing "furrows in the sea."



LeGRANDE R. HUMPHERYS

by Elvin Downs, Specialist
Vocational Agriculture Education
State Board of Education
Salt Lake City, Utah

Elvin Downs

LeGrande Rich Humpherys (known as "L.R." by his many friends), prominent educator and author was appointed State Supervisor of Agricultural Education in Utah in 1926. From 1928 to 1937 he served as both State Supervisor and Professor of Agricultural Education at the Utah State University. In 1937 he was named Teacher Educator in Agricultural Education at the Utah State University on a full-time basis and Mark Nichols was appointed State Supervisor. "L.R." held this position until he retired from vocational education in 1950. From 1950-1969 he assisted in administering programs at the Utah State University, in Summer School, and in University Extension class work. He was always a great champion of vocational education and especially of vocational education in agriculture.

He graduated from the Utah State University in 1912. He studied at Harvard, Cornell University and the University of Chicago. He taught as a visiting Professor at Colorado State University, the University of Arizona, Louisiana State and Ohio State Universities. He served as Vice President of the Agricultural Education Division of the American Vocational Association and was President of the A.V.A. 1940-41.

Besides contributing numerous articles to the Agricultural Education Magazine and A.V.A. Journal, "L.R." edited the *Early Development of Vocational Education in Agriculture in Utah* and co-authored *Agricultural Enterprises.*

Active in civic affairs he was past President of the Kiwanis Club, member of the Cache Valley Boy Scout Council and chairman of a committee that built one of the major L.D.S. chapels in Logan.

Numerous educators over the state and nation have expressed appreciation for the inspiration and leadership given by "L.R." He was a tireless worker, a motivator, and an innovator with a keen sense of humor and the ability to get teachers to "plan their work and work their plan."

L. R. Humpherys was a trained engineer. Perhaps it was this background that made him exacting, precise, and accurate in his work. He insisted on the same performance from his students and teachers in the field. There was no place for guesswork or shoddy performance. As you reflect upon the life of this good man, there are four very definite philosophies in Vocational Agriculture that stand out above all others:

Instruction Based on Farm Survey

L. R. Humpherys insisted that instruction begin at the grass roots. Community surveys were the basis for all instruction that took place in the local Vo-Ag Department. Techniques in making farm surveys were a part of the teaching in L.R.'s methods course.

Plan Your Work — Work Your Plan

Students who graduated under the tutelage of L. R. Humpherys were very familiar with this cliche. "Plan your work and work your plan" was as much a part of L. R. Humpherys' life as was his dedication to Vocational Agriculture.

FFA is Vocational Agriculture

L. R. Humpherys was among the stalwart few that sat around the table in the old Baltimore Hotel in Kansas City in 1928 and outlined the first draft for the national organization of Future Farmers of America. The development of FFA leadership was uppermost in his mind, and he played the game to win when promoting FFA activities.

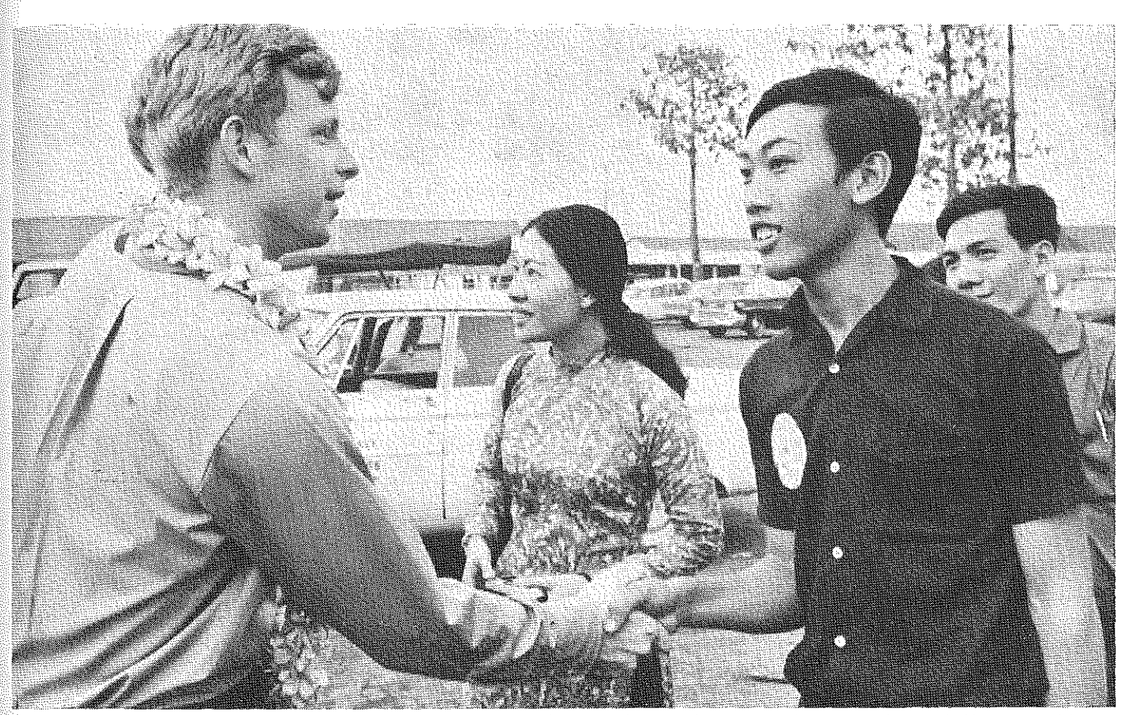
Evaluate Your Work

L. R.'s enthusiasm for evaluation was clearly demonstrated in the preparation of the first instrument prepared nationally for the evaluation of Vo-Ag departments. He insisted that it was not enough just to teach — it was more important to deliver a trained product. He was chairman of the committee that prepared the bulletin *An Evaluation of Local Programs of Vocational Education in Agriculture,* first published in 1949 and reprinted in 1957. Dr. F. W. Lathrop was secretary and compiled the bulletin under the direction of Dr. W. T. Spanton. This was one of the most comprehensive instruments ever developed for the evaluation of the complete program in agricultural education.

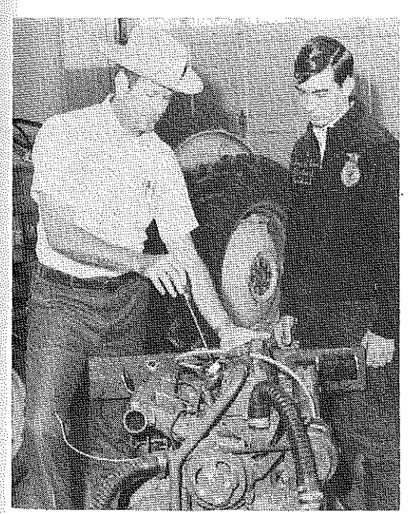
His life was truly one of strong conviction for the role of Vocational Education. His enthusiastic dedication concerning Agricultural Education will long be remembered in Utah and throughout the nation.

Stories in Pictures

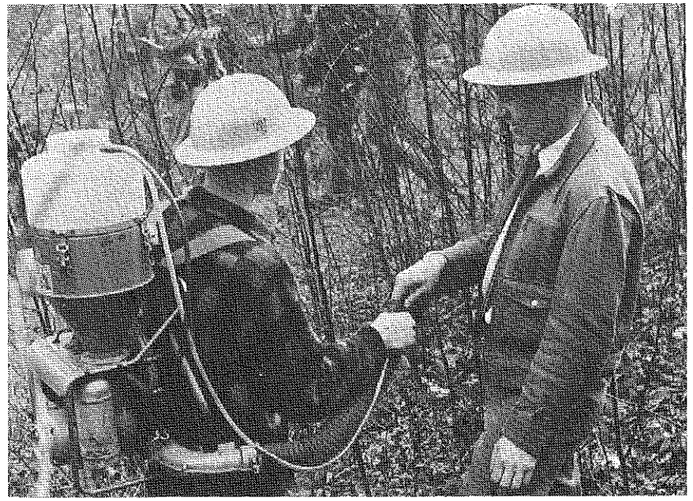
ROBERT W. WALKER
University of Illinois



Dave Dietz, National FFA Vice President from the Pacific region recently spent three weeks in Vietnam assisting the South Vietnamese Ministry of Education in their efforts to organize a Future Farmers of Vietnam. (Photo from the National FFA Center, Virginia).



F. D. McCormick, vocational agriculture teacher in Alachua, Florida instructs FFA member, Johnnie Copeland in the care and operation of a gasoline engine. (Photo from the National FFA Center, Virginia)



The Arlington School District in Snohomish County, Washington State operates a farm forestry program on 240 acres of Class I forest soil that was logged of the old growth timber and at present has trees growing over 25 years of age that were planted by students of this program. Bob Blowers, 17, Senior, with the "Back Pack Spray Mist Machine" is ready to spray for red alder and other undesirable tree plants. Keith Sarkisian, vocational agriculture instructor, is assisting. (Photo by Alex Crewdson, State Supervisor in Vocational Education).

PLANNING IN-SERVICE PROGRAMS IN AGRICULTURAL MECHANIZATION

George A. Robinson, Research Director
Kansas Association of School Boards
and Joe P. Bail, Teacher Education
Cornell University

With the mass of research information and the myraid of practices for in-service education, one might conclude that little of significance would materialize from one more status study. Yet, the intent of a study in this area[1] was to identify teacher needs for more effective teaching of agricultural mechanization and to recommend a program of in-service education for meeting their needs.

Before undertaking this study, an attempt was made to determine what some states had been doing in the area of in-service education in agricultural mechanization. In an non-published study in 1966 the authors surveyed the state supervisors of agricultural education in 12 states selected nationwide. From the data supplied by 11 respondents, the following information was obtained for the three-year period, 1964-1966:

1. one state provided no in-service education;

2. a total of 16 college credit and 11 non-college credit courses were available in 10 states;

3. two states averaged more than one course per year; four, one; and four, less than one.

Assuming a study would be feasible, it was decided to limit the survey to the State of New York and to include the following three groups in the sample:

1. Teachers specializing in agricultural mechanization plus those teachers who taught agricultural mechanization as part of their production programs.

2. Farm equipment dealers from the counties where the teacher was teaching.

3. Teacher educators and state supervisors of agricultural education.

Although the intent was to include both farm machinery and farm power, the study included only farm power because of limitations of time and scope.

In achieving the main purpose of the study, five major objectives were developed. Stated in question-form they are:

1. What was the relationship between teacher perception of the extent that competencies (skills) were used by mechanics in farm dealerships and the extent that persons in dealerships (owners, managers, or shop foremen) say they were used?

2. What was the relationship between teacher perception of training needed by persons to perform at the entry-level as a mechanic in farm equipment dealerships and the training which persons in dealerships expected of beginning (entry) workers?

3. What was the relationship between teacher estimate of their training needs and the training which persons in dealerships estimated was needed to more effectively teach agricultural mechanization students for entry-level jobs?

4. What was the relationship between observed and expected technical and skill training needs of teachers to more effectively teach agricultural mechanization students for entry-level mechanical jobs in farm equipment firms?

5. What was the relationship between professional education needs reported by teachers for teaching agricultural mechanization and the needs which teacher educators and state supervisors reported were needed?

Data needed to answer the questions raised in the objectives was collected by three separate instruments. The first, entitled Part A—*Competencies Needed by Persons Performing Mechanical Tasks on Farm Equipment,* was completed by 42 farm equipment dealers. The second, Part B—*Competencies Needed by Persons Performing Mechanical Tasks on Farm Equipment,* was completed by 18 agricultural mechanization teachers and 35 production agriculture teachers. Part A and Part B instruments contained identical response items. Category headings were different. The third instrument, *A Program of In-Service Education for Meeting the Professional Education Needs of Teachers in the Specialized Instructional Area of Agricultural Mechanization,* was completed by the seven teacher educators and five state supervisors for agricultural education.

After categorizing the responses, chi square was used in determining the significance of the responses at the .05 level. The 2 x 3 and 3 x 3 contingency tables were used for objectives one, two, three and five. The 1 x 3 equal probability contingency table was used with objective four.

For objective one, concerning extent of competency use in farm equipment firms, teachers were in agreement with dealers for 56 of the 101 items. In 45 of the instances, the distribution of teacher responses resulted in significant chi square values. To 43 of the significant items, teachers indicated by their modal responses that competencies would be used frequently in farm equipment firms while dealers had responded that four of them were used frequently and 39 occasionally.

Teachers perceived extent of training needed by entry-level mechanics the same as dealers for 76 of the items about technical knowledge and for 66 of those on skill development. As a result, the null hypothesis for objective two was accepted for 76 per cent of the responses to technical knowledge needs and 65 per cent of those for skill development. In 18 of the 25 cases where teacher perception of technical knowledge needs differed significantly with dealer expectations, teachers had reported that mechanics needed full knowledge while dealers said they expected partial knowledge. To all but four of the 35 significant items on skill development needs, teachers had responded that full skill was needed.

Regarding additional training needed by teachers to more effectively teach agricultural mechanization students for entry-level mechanical jobs, there was agreement between dealers and teachers on 98 of the 101 items related to additional technical knowledge needed and to 96 of those related to additional skill development needed. The null hypothesis for objective three was rejected for only three per cent of the responses to technical knowledge needs and for five per cent of the responses to skill development.

The teacher portion of the data used in testing objective three provided the information used in testing the hypothesis for objective four. Significant chi square values occurred in each of the 12 different systems or parts into which the competency items were grouped on the Part A and Part B survey instruments. Teacher evaluations of their training needs resulted in 70 significant items. Many of these were significant for both technical knowledge and skill development. Modal responses for 23 of the 70 items appeared under the category "little or none." With little or no training needed for these 23 items, teachers had a net need for additional training in 47 of the 101 competency items to more effectively teach agricultural mechanization students.

Fifteen of the 72 items in Part C pertaining to professional needs were significant. None occurred in the first division, which concerned improved teaching methods. One appeared in the second division on instructional materials. Four items were significant in the third division, regarding assistance in coordination and supervision of cooperative work-experience programs. Six were significant in the last division on planning and teaching in-service education courses.

The following conclusions were drawn from this study:

1. Teachers tended to perceive that competencies were used to a greater extent in farm equipment firms than was the case.

2. Dealers did not expect entry-level mechanics to be as extensively trained as teachers perceived they should.

3. Nearly perfect relationship existed between teacher estimate of additional training needed in technical knowledge and skill development and dealer estimate of teacher needs.

4. With the exception of the exhaust system, each system or area into which the study was divided contained competencies (skills) in which teachers needed additional training.

5. Teachers need for professional education was not as extensive as their need for technical knowledge and skill development.

6. In-service education programs would be most valuable to teachers during the first year following completion of this or similar studies.

7. These findings represent the in-service education needs of a select group of teachers. Replication with randomly chosen samples could verify or alter the findings and recommendations.

The recommendations from this study resulted in the following guidelines:

1. that in-service education programs make provisions for:
   a. acquainting teachers with the extent of use of specific competencies in farm equipment firms;
   b. acquainting teachers with training needs in technical knowledge and skill development expected by farm equipment firms of entry-level mechanics;
   c. having farm equipment dealers serve in an advisory capacity for identifying in-service needs of teachers;
   d. varying the content emphasis according to individual teacher needs in technical knowledge, skill development, and professional education;
   e. including more persons in the planning and teaching phases of in-service education programs.
2. that the findings be used in evaluating and improving pre-service education programs so as to minimize the problems of new teachers when they begin teaching in this specialized area.
3. that periodic assessments be made to determine needed adjustments in pre-service and in-service educational programs for agricultural mechanization teachers.

[1]Robinson, George A. "In-Service Education for New York Teachers of Agriculture in the Specialized Instructional Area of Agricultural Mechanization." Ed.D. Thesis, Cornell University. 1969. 218 pp.

POLARIZATION IN VOCATIONAL PHILOSOPHY

Herman D. Brown, Associate Professor
and Jay P. Grimes, Graduate Fellow
Agricultural Education Department
Texas A&M University
College Station, Texas

"Let's get it all together." A recurrent theme is developing around this phrase in contemporary America. The connotation of "getting it together" is a demand for the fusion of polarized opinions and attitudes in order to develop approaches appropriate to society's problems. Our society seems to be overwhelmed with diversity of opinion and attitude.

Vocational education and guidance are no exceptions. Polarization exists at their very heart — the concept of work. This philosophic polarization in vocational education, vocational guidance, and the concept of work must be neutralized. In addition, fusion of attitudes in these areas must be attained if the vocational needs of American society and the individuals composing it are to be fulfilled. In short, we've got to "get it all together."

At this point in time, the majority of our society is faced with an almost infinite array of work possibilities, yet believes that satisfaction of its needs and wants lies outside the world of work. The belief is retained that public education can provide individuals with the competencies needed to enter and advance in an occupation. Yet, that educational system provides preparation in only an infinitesimal portion of the array of possibilities. Guidance programs, either through design or accident, have often found themselves manned by individuals having little experience outside the academic realm, and catering almost exclusively to a minority of students who actually intend to enter a college or university in preparation for a profession.

Societal attitudes appear to be the major contributing factor in the polarization of vocational education, vocational guidance, and the concept of work. These attitudes have tended to fluctuate over the years, eventually developing to their current state and consequently affecting the three areas mentioned in such a manner as to drive them into the contemporary polarized condition. To better understand this polarization, it might be well at this point to consider the development of attitude in the three areas.

Since a *concept of work* is fundamental to either vocational education or vocational guidance, possibly it deserves first consideration. Man's concept of work has moved from one extreme to the other throughout history. Interpretations of Biblical writings indicate that man viewed work as evil or as punishment for his sinful nature. The attitude continued for centuries, being modified only in that those close to God were deserving of freedom from physical labor. Both rulers and the clergy were believed to be selected by God and, as such, "above" the travail of common man. Only when man (the clergy in particular) began to drift away from an absolutely idealistic philosophy toward realism did work begin to lose a degree of its evil connotation. Even then, work was of a positive nature only when it was in the service of God. This attitude still exists to some degree.

Perhaps the greatest change in the concept of work occurred during the settlement of the United States. Under the primitive and adverse conditions existing in that period, man found that survival was dependent on individual and collective ability to work. Consequently, work became viewed as a positive value. The kind of work involved had little to do with its value. The gunsmith was as important to survival as was the physician. Individual independence in a vocation was the order of the day. Often the individual's labor involved every step from raw material to finished product. As a result, he could take pride both in his work and in his personal contribution to society, for both the work and the contribution were highly visible.

The industrial revolution, however, brought an end to this visibility for both the craftsman and the laborer. Their work became specialized, or even fragmentized. Only the entrepreneur had control of the "big picture." The demands of survival became less pressing, and the time arrived when the kind of work a man performed determined the value of that work and of the man himself.

The working man was no longer independent, and was under supervision and pressure to produce more and more, as efficiently as possible. Personal satisfaction and self-esteem could no longer be derived from the vast majority of occupations, in and of themselves. Rather, occupations became a means of achieving pleasure through other ends. Here is the point where we find ourselves today in regard to the concept of work.

Vocational education is based primarily on the concept of work and had its beginnings in the family. In early times father provided son with the skills necessary to carry on the family occupation. In time, this practice developed into the slightly more formalized apprenticeship method of gaining occupational skills. For the most part, such training was manually oriented and was usually undertaken by the lower classes.

Following the industrial revolution, society for the first time assumed the primary responsibility for vocational education, as we know it today, and assigned it to the public schools. Prior to that time, formal education was essentially for the upper classes and of a general nature. It was believed that such an education provided the facilities needed for coping with the requirements of business and social leadership. This attitude is still prevalent today, as evidenced by many of the programs in our public schools, colleges, and universities. Therefore, only the lower classes who would perform skilled and semi-skilled labor needed "vocational education." In addition, the technological advances of that time were so limited as to require program development by the schools in only a few vocational areas. Only within the past decade has any appreciable broadening of vocational education in the public schools been realized. In the interim, industry has assumed much of the responsibility for vocational preparation.

Guidance programs, in all probability, derived their beginnings from the vocational programs of Frank Parsons. However, the rising influence of psychological therapy caused the vocational aspect of guidance to be pushed into the background. Guidance counselors found themselves concerned more and more with psycho-social adjustment and the task of placing high school graduates into the "right" college or university. The trend away from guidance for the vocationally directed student toward guidance for the college-bound has continued until the present day. It is only within recent years that a concerted effort has been made to prepare counselors for the function of vocational guidance.

If current societal attitudes and values are basic to the polarization in vocational education and guidance, it is within those same attitudes that change must originate. Both an intensive and broad effort are necessary if change and the resulting fusion of the concept of work, vocational education, and vocational guidance is to take place.

A program of occupational appreciation needs to be developed for the beginning years of public education. A start has already been made, but there is still room for improvement. Appreciation can be gained first through the relating of subject matter to the various areas of the world of work and secondly, by inculcating a greater understanding and appreciation on the part of teachers for all levels or types of work. Teachers and society in general must accept the fact that all students cannot become leaders of industry and society. In addition, they must be willing to accept education as a learning process, not a "weeding out" process.

The program of occupational appreciation should gradually phase into one of occupational exploration. Such a program should permit a student to explore, individually, those vocations that he has considered heretofore in his world of fantasy.

The student should next move into a program of vocational experience, or in-depth exploration. This experience or exploration should follow tentative vocational choices resulting from earlier general exploration and vocational guidance which has provided a valid assessment of interests and abilities. At the end of this program, the student should be ready to prepare for a "job cluster," or possibly a specific occupation.

Actual preparation or extended experience in specific occupations should begin at the point when most students are completing high school. This program should provide a flexible transition, however, allowing for both early and late vocational choice. This particular phase of vocational training should be conducted at the community or junior college level. Training at that point should remain pre-occupational in nature, i.e., skill development which would be applicable in a variety of specific job classifications. In order to provide the wide variety of experiences needed throughout the world of work, a state or national plan should be developed under which various institutions would provide specialized programs, avoiding duplication in so far as possible.

Once broad proficiency is gained, the student should look to industry for final job preparation in a specific occupation. In many instances, industry has already developed highly effective and efficient educational programs. Individuals wishing to pursue professional careers might follow the pattern outlined or the more traditional pattern of a university education.

Concurrent with such a series of programs, continuing vocational and avocational guidance would be essential. Guidance of this type would require the development of a tremendous amount of supportive material including, but most certainly not restricted to, a broad array of interest and aptitude measurement instruments. It is through such a guidance program that concepts of the relationship of vocational and avocational needs can be determined and met.

In addition to a revision of vocational attitude and approach in the public schools, a means for changing adult vocational attitudes is needed. The mass media can provide such a means. The media are currently being used to mold attitude on such social problems as race relations, drug abuse, smoking, and mental health. The door has already been opened in the area of vocational appreciation, if one considers certain popular television program formats. If radio, television, newspapers, and magazines can create a national awareness of "environmental crisis," could they not also create an awareness of vocational needs?

The changes recommended would be rather drastic, time consuming, and difficult to implement. Even so, until vocational education takes into consideration the total reality of the world of work and the pattern of child development in vocational selection, it will serve only a few, and these rather impotently. Until vocational guidance can provide the insights and information needed for intelligent occupational and avocational selection, it will fall short of its intended function. Equally, avocation must become accepted as an integral part of the concept of work. Until individual value is attributed to one's total life style, vocational guidance and education can accomplish little toward fulfillment of individual and societal needs. At the time when the three, the concept of work, vocational education, and vocational guidance, become focused on those needs, then and only then, will fusion take place and will we really be ready to "get it all together."

SUMMER COURSES AND WORKSHOPS

Each year many Universities offer summer courses, workshops and seminars of interest to teachers in other states. Your editor has compiled the following list of offerings from replies received to a questionnaire mailed to each land grant college and institute training teachers of vocational agriculture.

University of Arizona, Tuscon 85721
Guest professor — E. M. Juergenson, U of California, Davis. Title of Course: Utilizing Land/Livestock Laboratories. Description: Guidelines, standards, policy and procedures for planning, organizing and utilizing school-owned land/livestock laboratories. Dates: June 14-18. 1 semester hour credit. $16.00 tuition.

Southern Illinois University, Carbondale
Team teaching. Ag I 485 — Philosophies of Ag. Ed., Bus. Ed., Home Ec. Ed. and T & I Ed. — 3 quarter credits
Ag I 525 — Developing and administering a Cooperative Ed. Program, coordinator's duties. 4 quarter credits. June 21-July 16.
Ag I 512 — Prepare coordinators to fufill their responsibilities through an internship — 6 quarter credits.

University of Illinois, Urbana
Guest professor — Martin McMillion, U of Minnesota
Vocational Education in Agriculture for Adults. Methods and procedures for planning, organizing and teaching adults; using advisory groups; evaluating outcomes of instruction. June 21-July 16. 2 semester hours.

Michigan State University
Dr. Frank Bobbitt. Structured Occupational Activities in Agricultural Business. Provides occupational experience in ag business for area vocational school instructors, junior college instructors and teachers of agriculture who may aspire to move into those areas. Student will be placed in an ag business of the student's interest area to acquaint the student with as many phases of the business as possible. June 21-July 2. 4 quarter credits. Tuition $136.00.

University of Minnesota, St. Paul
Guest Professor — Robert Warmbrod, Ohio State University
Planning and Policy of Vocational Education. June 14-July 2. 3 quarter hours.

Rutgers University, New Brunswick, New Jersey
College Staff: Developments in Crop Production — vegetable, field, greenhouse, turf. July 19-30. 2 semester credits. $30.00

Cornell University, Ithaca, New York 14850
Workshop. To develop modules of instruction for use in agricultural education programs. July 12-30. 2 semester hours. $25.00 per credit hour.

North Carolina A & T State University, Greensboro
Cooperative Work Study Program. Principles, theories, organization and administration of cooperative work experience program. June 14 - July 2. 3 semester hours. $153.00 non-resident Developments and Trends in Agricultural Education. July 5 - 23. 3 semester hours. $153.00 non-resident.

The Ohio State University, Columbus
Leon W. Boucher. Workshop for Cooperating Teachers.
To develop competent cooperating teachers for Vo-Ag. 3 quarter hours. June 15 - July 2. $110.00 (may enroll for another 3 credit course of 8 offered)

Oregon State University, Corvallis
Guest Professor: Richard V. Jones, Stanislaus State College.
Workshop in Teacher Education. Each participant will develop a learning package for a selected topic. 3 quarter credits. June 21 - July 2. $51.00
Guest professors not indicated at date of submission.
Courses — Administration and Supervision of Agricultural Education; Federal, State and Local Organization for Administration of Voc. Ed. in Agriculture; Recent Laws, Regulations and Policies Affecting Voc. Education in Agriculture. July 5-23. 1½ semester hours. $28.00.

University of Vermont, Burlington
Workshop for Vocational Teachers for Educable Mentally Retarded Pupils. Concepts, develop instructional material and plan laboratory exercises. June 21-25. 2 semester hours. $72.00
Practicum in Business and Industry. 2 week directed field experience combined with 1 week classroom. July 5-23. 3 semester hours. $108.00

Virginia Polytechnic Institute, Blackburg
Workshop: Organizing and Conducting Programs for the Disadvantaged. Responsibilities and tasks involved. 3 quarter hours
Workshop: Organizing and Conducting an Agribusiness Option Program. Preparing teachers for a specialized option in agribusiness other than farming. Emphasis on curriculum, occupational experience programs, program development, resources needed. 3 quarter hours.
Workshop: Organizing and Conducting an Ag Machinery Services Option Program. Curriculum, facilities, teaching techniques, planning and conducting occupational experience programs. 3 quarter hours. June 14-25. $55.00 for 3 quarter hours.

Washington State University, Pullman
Guest Professor — John Coster, North Carolina State University
Problems and Trends in Voc. Ed. Planning, Implementing and Evaluating Experience Program. July 5-16. 2 semester credits. $15.00 per semester hour.
Guest Professor — Elizabeth Hunt. North Carolina State University
Problems and Trends in Vo. Ed. Occupational Experience in Elementary Schools. June 22 - July 2. 2 semester credits. $15.00 per semester hour.
Guest Professor — Melvin Barlow, University of California, Los Angeles
Problems and Trends in Voc. Ed. Philosophical Foundations. August 2-13. 2 semester hours. $15.00 per semester hour.

A FIRST-YEAR TEACHER'S COURSE

Roland L. Peterson
Agricultural Education
University of Nebraska
Lincoln, Nebraska

One of the critical issues facing teacher educators in agriculture is the preparation of teachers who understand the complexities of today's agriculture as well as the diversity of interest, motivation, and ability of today's student. Teacher educators . . . how good is our product? Teachers of agriculture . . . are you able to perform your role effectively?

How well prepared is the beginning teacher for his position? After the excitement of graduation and subsequent moving to a community to launch a career in teaching, the first year teacher may become a lonely person in a strange environment. The immediate question facing the teacher is to establish priorities and to decide where to begin.

With these concerns in mind, the staff members in the Agricultural Education Department at Nebraska developed a graduate course exclusively for first-year teachers. The idea was not original to Nebraska, however, limited numbers of staff members frequently prevent teacher education institutions from conducting intensive follow-up and assistance to their graduates for an entire school year. Some school administrators expressed surprise when they discovered teacher educators intended to assist a first-year teacher on an organized basis for an entire year.

The purpose of the course is to evaluate the quality of the product being generated by the teacher education department and to assist the first year teacher in coping with the problems facing him by providing instruction, encouragement, and moral support during the critical months in the new career of teaching.

The course usually begins in mid-August and continues throughout the school year. Organizing the class becomes the most difficult task since the 20 to 25 first-year teachers may be scattered across the entire state. Generally the teachers are placed into four groups where driving to class involves 100 miles or less. As a rule, the groups will meet about once every five weeks throughout the year and the teachers will receive three hours of graduate credit through the University's Extension Division. The groups meet in a different school each time from 5:00 until 10:00 p.m. In the group meeting the first half of the time is spent discussing the problems and subject matter the teachers are experiencing. The last half of the period is spent discussing topics such as organizing an adult class, preparing and planning for FFA and Vo-Ag Contests, planning for summer programs, managing the Vo-Ag department, curriculum development, off-farm agricultural occupations programs, and teaching techniques. In addition, each teacher is observed for one entire day by the teacher educator responsible for the class. Generally, first-year teachers are eager to get together, discuss their problems, exchange ideas, and gain new insights for more effective teaching. They are not embarrassed to discuss problem areas they are having difficulty teaching. Instruction is frequently given to assist them in teaching subject matter they failed to obtain as undergraduates. This instruction may range from teaching a skill to providing assistance in balancing a livestock ration. Thus, the course produces behavioral changes in the first-year teachers.

The results of this procedure have been gratifying. Teachers express satisfaction because they have had someone to share their concerns with and at the same time, have received help with a wide range of problems. Teachers leave the course with a full set of daily lesson plans and a course outline designed for their community.

Of considerable importance to the University staff has been the opportunity to observe the strengths and weaknesses in the teacher education program. The personal visits to each school have enabled the teacher educators to gather data regarding the product — first-year teachers. An evaluation instrument was developed which focused on five areas suggested by Mager[1], namely: (1) the instructor; (2) the instructional materials and devices; (3) the students; (4) the physical environment; and (5) the administrative rules or policies. Mager suggested that a list of teacher behaviors be examined which exist in the school-related conditions while the student is in the presence of the subject matter.

This evaluation instrument has provided data which list the desired behaviors of first-year teachers regarding their instruction and the materials and environment they provide. As a result of using this instrument to identify and evaluate teacher behaviors, recommendations were written for initiating change in the teacher education program. Evidence from this course has resulted in a totally new approach to the undergraduate pre-service preparation program. Today, undergraduates in Agricultural Education at Nebraska are taught on an individualized basis utilizing instructional packages and a variety of media. Thus, the first-year teacher's course has and continues to generate change in the teacher education program.

These mutual benefits make the first-year teacher's course a high priority responsibility if we are to be accountable for our product.

[1]Mager, Robert F. *Developing Attitude Toward Learning*. Palo Alto, California: Fearon Publishers, 1968.

TEACHER PREPARATION FOR THE CULTURALLY DIFFERENT

DOES THE PROFESSION BELIEVE THE CAUSE IS WORTH THE EFFORT?

Henry E. Schmitt, Assistant Professor, College of Education
Virginia Polytechnic Institute and State University
Blacksburg, Virginia

and

Ralph E. Bender, Professor and Chairman
Department of Agricultural Education
The Ohio State University
Columbus, Ohio

"Are you trying to figure out if school makes any difference to us, because if that's it, I can tell you, man, here in my heart, it don't much."

"Teachers expect you to act like white—middle class—if you don't, you're no good!"

"Teachers—the white ones and the black ones who think I've made it—and the Mexican ones who think they've escaped are prejudiced against poor kids, black kids, Mexican kids, slum kids . . . But I try to like most of them, or I try to make them believe I like them."

"The teachers that the school board and the principal say are good are not good in my eyes. Cats like that get points for being good but they aren't really judged by the right things—by the things that really count—like how well does he get along with all students, what do the kids really think about him, like whether he wants to or can talk on an eyeball level—like is he for real. Teachers that grade well on student standards are downgraded in the system."

Who listens to such outcries of black youth from the central city schools of Cleveland or Appalachian white youth from the rural schools of Kentucky? Are these comments somewhat confusing or do we as educators merely hear what we want to hear while negating the obvious causes for such outcries?

The vocational teacher in agricultural education is a key person upon whom the educational success for minority youth enrolled in agriculture courses depends. Yet the majority of agricultural educators have remained in the back waters of provincialism regarding viable course offerings for minority youth. Teachers of agriculture need not carry a "conscience of guilt" for this anomaly because teacher education institutions have not provided unique experiences, activities and preparation for teachers of minority populations.

A bold new strategy for change must be initiated if the straps of orthodoxy in teacher education are to be broken. This process of change must significantly influence both the minority and the majority cultures. These three developments culminating in the latter half of this century must be considered in developing a relevant teacher preparation model: (1) explosion in quality of information and knowledge available to man; (2) massive increments in technological competence and the cybernetic era; and (3) significant shifts in the economic, political and social balance of power.

The following premises provide the foundation for the preparation of teachers in agriculture serving minorities. These premises reflect Schmitt's personal experiences with minority groups, a synthesis of the current research, data[1] collected from 92 per cent of all institutions preparing teachers of vocational agriculture, analysis of selected teacher preparation programs for the disadvantaged, and the opinions of selected experts throughout the United States.

Premise 1. Vigorous efforts must be placed on recruiting and selecting teachers from the ranks whom they serve. Increased numbers of Black Americans, Appalachian Whites, American Indians, Spanish Americans, Mexican Americans, and Puerto Ricans should be encouraged to become vocational teachers in agriculture. "Role identification" which leads to a positive self-concept of a student as a member of a minority can be learned if teachers from these cultures are successfully recruited.

Premise 2. Professional agricultural teacher preparation curricula must provide a wide array of alternatives. Prospective agricultural teachers of minorities should have numerous courses from which to select. An interdisciplinary approach rather than the traditional monolithic approach should be available. Students must be provided with more choice of courses in history, sociology, anthropology, economics and philosophy. Hence, a student desiring to teach in the central city should have the option of taking Afro-American History, Swahili, Yoruba, or Arabic; a student desiring to teach on an Indian reservation should have the option of taking Navajo, Sioux or Cree languages; and a student desiring to teach in the Appalachian region should have the option of taking an economics course designed for minority or underdeveloped countries.

Premise 3. Teacher preparation institutions in agriculture must provide a continuum of educational experiences from entry to retirement. Stimulating and meaningful experience must be provided for the student from the initial point of freshman entry until the teacher leaves the agricultural education profession. Observing a wide array of successful teaching styles and actual supervised induction in the teaching-learning processes must become an integral aspect of the undergraduate curricula.

"On the street" experiences, supervised work experience programs, internships and extensive travel for agricultural teachers of minority youth should receive equal emphasis with academic course work. Once teachers become certified, they must receive continual encouragement, supervision, professional course work, and expertise provided by teacher educators. This meeting and merging of thoughts and experiences must become a two-way communique whereby teachers provide an input. A design where future vocational teachers in agriculture receive terminal activities and course work throughout their four or five years of preparation will not suffice if quality teachers for minorities are to be retained.

Premise 4. Teacher education in agriculture must prepare the teacher to genuinely utilize parental involvement in developing realistic educational experiences for their children. Minority parents most often perceive education as the essential ingredient in breaking the bondage of their environment. Therefore, they must also be involved in planning and administering "active" or living educational endeavors. Agricultural teachers, students and parents must become welded into a "community of learners" rather than opposing encampments. A jointly traveled educational journey will assist the agricultural teacher in learning the true meaning of empathy and its importance in the realization of minority needs.

Premise 5. Early involvement with minority children, youth, and adults must be an important element in teacher preparation for students enrolled in agricultural education. Preparation for teachers in agriculture who will serve minority groups should begin at the high school level. Cadet teaching, Future Teachers of America, and similar organizations should be overtly encouraged by all teachers. This reservoir of potential teaching energy must be utilized in such activities in agricultural education as assisting students in completing an assignment, presenting a short report, helping evaluate assignments, or merely walking a youngster home and visiting with his parents.

At the college or university level there is no research or reasoning indicating that prospective teachers should wait until their junior or senior year for active involvement in a teaching-learning experience. Obviously it takes considerable time, preparation, and tolerance to understand a student from a broken home, living on a deficient diet, accustomed to alcoholism or drug addiction, with a police record, and a unique culturally different life style.

Premise 6. Teacher preparation programs in agriculture must be designed so that the teacher has an excellent chance for success. The minority youth has experienced a life filled with failures in the majority culture. To solve this perplexed problem, teacher educators need to understand what "vocational agriculture", the "FFA", and "production enterprises" connote to a Black from Los Angeles, a Mexican American living in a migratory farm camp, or a Navajo youth from Many Farms, Arizona.

Motives may be far more important in teaching minority students than skills. The theory underlying this assumption is that when a person wants something, he attempts to get it. There is no such thing as an "unmotivated" student. The skilled agriculture teacher must utilize enumerable techniques to "turn on" students. Sometimes erratic, unorthodox and creative teaching methods should be encouraged by teacher educators in a milieu free of good or bad ideologies.

Premise 7. Future vocational teachers in agriculture must become increasingly "person-oriented" and "student-centered". Unquestionably, the successful teacher in agriculture serving minority students will be sensitive to man in relation to a changing social order. To accomplish this goal, teachers must understand their motives before embarking on an education career of serving minority children, youth, and adults. There is no place in agricultural education for the selfconscious do-gooder, or the articulate teacher professing mere rhetoric. To the contrary, a total dedication and a positive humane theory of action will endure for agricultural teachers educating minorities. This suggests that all teachers of agriculture, whether recruited from industry, from minority cultures, or the majority culture, must accept each student as a unique human being.

Premise 8. Agricultural teacher preparation must become a cooperative venture between local school districts, state departments of education, industry and community organizations. Effective education for both American minorities and majorities must become a number one priority. The outmoded producer-consumer posture, i.e., colleges and universities producing teachers, school districts consuming and discarding a large proportion of the annual production of beginning teachers, must cease. Development, administration, and continuous preparation experiences must become a cooperative effort by all agencies involved.

Premise 9. Teacher education institutions in agriculture must establish state, regional, and national councils to insure a power base from which adequate financing can be secured. Efforts by institutions preparing vocational teachers must be coordinated and used for procurement of adequate finances and leadership. It is within the political arena where decisions are made and authorization and appropriations of funds for education are determined. Teacher educators cannot remain naive to the political-economic processes that direct the nation's course of travel. Strong lobby groups for teacher education are needed at the state, regional and national levels.

Premise 10. Fifteen to 20 per cent of the minority teachers' contractual time should be spent cooperatively with the university, local school district, and community in conducting research and/or professional improvement activities. Ample time for scholarly inquiry and research will become an imperative for agricultural teachers serving minority students. Behavioral models, teaching styles, educational alternatives (The Parkway Program, Storefront Academies, Minischools and Summerhills), tutoring projects, educational games, integrative curriculum and a period for reflection and critical examination of the projects and experiences must be an integral part of a continuous professional teacher preparation program.

Experience—Empathy—Commitment—Action

It is imperative that tokenism and rhetorical dictums in teacher education be replaced with commitment and action if the educational deprivation of minorities is to be ameliorated. The aforementioned teacher preparation premises attempt to represent a systematic orientation, induction, and professional continuum which will eliminate the abrupt lines of terminal experiences normally associated with traditional preparation programs. It is firmly entrenched in professionalism, individualism, and spiced with a vigor for self-renewal.

Perhaps a new teacher preparation credence in agricultural education will insure an equitable opportunity toward the enhancement of individual dignity —supposedly the deepest and truest goal to be conceived by the American people. In retrospect, the overriding question remains—is the cause worth the effort?

[1]Henry E. Schmitt, "A Model for Preparing Teachers of Agriculture for Minority Populations," Ph.D. Dissertation, Department of Agricultural Education, The Ohio State University, 1970.

The 1970 World Conference on Agricultural Education

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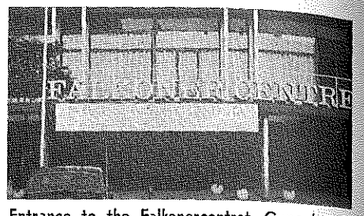

Entrance to the Falkenercentret, Copenhagen, Denmark where the World Conference was held.

July 28 - August 8, 1970 saw a new benchmark established in agricultural education on the world scene. For the first time in history three major international agencies cooperated in a World Conference on Agricultural Education and Training. These agencies are part of the United Nations and include the International Labor Organization, (ILO); the Food and Agriculture Organization, (FAO); and the United Nations Educational, Scientific and Cultural Organization, (UNESCO). It is to their credit that the leadership of these organizations devoted hours of planning to develop a conference that would bring about advancements in the whole spectrum of agricultural education and training.

Aims and Objectives

Because this was a world conference it involved under-developed, developing and developed countries. Thus the establishment of aims and objectives necessitated consideration of a wide range of problems, educational levels and administrative structures. Needless to say, there was ample evidence of varying philosophies of what agricultural education was all about. For example, the consideration of vocational "training" as contrasted with vocational "education" was clearly evident. The United States of America, with its community school philosophy is, of course, different from the European idea of vocational "training" as opposed to vocational "education." The idea of educating someone who can manage land, labor and capital from a profit motive seems repugnant to my Russian colleague who grew up and was educated in the communal farm system. Nevertheless, the conference was harmonious, fruitful and provocative of new ideas.

Rather than attempt an assault of the entire field of agricultural education and training, the World Conference limited itself to "aspects which are generally regarded as of fundamental importance, for only in this way can major issues be usefully discussed and fresh lines of thought and action generated." Particular attention was given to an examination of agricultural education in the context of the rapid change needed for economic and social change upon which progress depends.

Three major aspects were identified as focal points for discussion.

1. *Appræisal* involving the study and critical assessment of agricultural education and training in different regions of the world in relation to their economic and social needs for agriculturel development.
2. *Examination of Problems* which prevent improvement to present systems of agricultural education and training. This examination must deal with the structure, organization and functions of agricultural education and training and must involve a critical examination of both the quantitative and qualitative aspects.
3. *Identification of Principles* upon which effective action can be based in the future. Particular stress will be placed on providing a clear and satisfactory basis for future work both at the national and international levels; it is in this respect, particularly, that the experience of the developed nations will prove important. A World Conference must help to provide the basis for fresh thinking, better planning and the more effective use of resources, as well as opening the way for more effective international cooperation.

The World Conference was essentially a technical meeting and included educational planners, administrators, ministry officials responsible for agricultural education, representatives of official and private external aid organizations for agricultural education in developing countries. In sum, the aims of the World Conference were extremely practical and zeroed in on topics and issues that would provide a springboard for further action.

Organization of the World Conference

The program of the World Conference was organized to take maximum advantage of the participants special interests. Seven major lectures were presented at as many plenary sessions distributed over the first nine days of the Conference. These were supplemented by eight regional papers which were distributed to the participants. The regional paper for North America was prepared by Dr. Gordon Swanson, Agricultural Education Department, University of Minnesota.

The plenary lectures together with the regional papers provided excellent background and guidelines for the smaller working groups of commissions in which most of the work of the Conference was accomplished.

For working purposes the participants, representing some 80-85 countries, were divided into three commissions each assigned an area of special responsibility as follows:

Commission I.
Higher Education in Agriculture

Commission II.
Intermediate Agricultural Education and Training

Commission III.
Vocational Training for Farming and Related Rural Occupations

Each commission was scheduled to meet for eight sessions of three hours each. These were distributed over the first eight days of the Conference and proved to be highly effective. Particularly helpful was the simultaneous interpretation into the four official languages, English, French, Spanish, and Russian.

While the commissions were stratified horizontally by subject or level of agricultural training, the agencies and discussion guidelines provided for vertical integrations. This was done by taking into account in each commission such items as manpower planning, administration, educational mobility, etc.

Reference was made earlier to the discussion guides provided each Commission for each session. Illustrative of the questions posed to Commission members are those listed below. They represent a sample of the kinds of issues discussed and one taken from the discussion guides for the first meeting of the Commission on Higher Education in Agriculture.

Question 1. Does higher agricultural education adapt sufficiently rapidly to the changing demands of agriculture?

Question 2. Are higher agricultural education systems producing the type of manpower which will be required for agricultural development in the future?

Question 3. What are the advantages and disadvantages for agricultural facilities in "urban" as opposed to "rural" universities? (This question has reference to land availability, proximity to and availability of livestock, machinery, crops, etc. for teaching purposes, general environment and similar physical and cultural differences existing among higher agricultural education units located in a metropolitan vs. a rural area).

Question 4. Are existing institutions for higher agricultural education able to provide the technologists required as agriculture changes from a semi-subsistence production to a market economy?

Question 5. Are training facilities adequate for the production of managers, agricultural economists, agricultural engineers, food technologists, extension agents, and teachers?

It should be apparent that with participants from throughout the world questions such as those listed above provided a basis for spirited discussion. From this writer's point of vantage it was a most revealing experience as representatives of various countries speaking from widely variant backgrounds and philosophies exchanged ideas, arguments and suggestions. There was throughout the Conference evidence of good will and a genuine concern for the man on the land.

Outcomes

So what did it all amount to? What really took place after the participants ventilated their prejudices, supported their theories and laid claim to solution of some vexing problems? The answers to these questions will only emerge as UNESCO/FAO/ILO develop programs in agricultural education at *all* levels.

It was not the purpose of the World Conference to reach decisions, pass official resolutions or take other actions with a binding effect on the sponsoring agencies. The purpose was as described earlier, a search for new approaches and fresh ideas coupled with an opportunity for free exchange and broader understanding.

A review of the report of the Rapporteur-General of the Conference leads on to wholeheartedly support his statement that,

> "It is now accepted that transplantation of systems of education and training from one country to another, without modification, has seldom produced results which are satisfactory . . . Of the many lessons of the past decade one appears to transcend all others: The supreme importance of the rural sector and of the rural people in the whole process of development. For far too long have the rural areas, their natural resources, and their immense human potential been the poor relations of most development policies and investment . . . because of the unique importance to national progress in so many countries, all social levels of the rural sector must be given a higher priority in development planning in order that the rural population may be enabled to make their full and appropriate contribution to the whole of development. Agricultural education and training must, therefore, be planned and developed as an essential tool for the improvement of the life of rural people."

The results of the World Conference in Agricultural Education and Training provides a wealth of ideas and inspiration for those dedicated and committed to serving the man on the land and his supporters. The importance and significance of the rural population is finally being recognized. To this end all those engaged in vocational agriculture may take heart.

While the Conference did not pass resolutions or take other "official" action the Commissions and the Conference did make recommendations. They are summarized below.

1. Careful planning and coordination, on a national basis, of the whole system of agricultural education and training is essential for maximum contribution to the development process as a whole. The system should be sufficiently flexible to adjust to future needs of agricultural and rural development.
2. It is important that the closest coordination be developed between agricultural education, research and advisory sources and the overall educational system. It would benefit governments to establish, where such bodies do not exist, national councils for agricultural education and training, research and advisory services and representatives of production and labor in the rural sector. Such councils would assist governments in assessing needs and appraising existing systems of agricultural education and training in relation to the whole of rural development.
3. The Conference envisages a much wider responsibility for agricultural education and training within the whole process of mobilizing human resources for rural development including peasants, farmers and their families, women and youth, skilled workers and others. Training should facilitate mobility in a changing rural and national economy. In view of the urgent need for improvement of the systems of agricultural education and training to enable them to play a far more dynamic role in rural development, it is essential that the necessary priority be given in allocation of resources.
4. Progress in the development of agricultural education and training will not be possible without the provision and support of well-trained teachers at all levels. The whole problem of training of agricultural teachers requires urgent attention in both quantitative and qualitative aspects. Within the context of agricultural and rural development, teacher training must include such categories as rural extension workers, teachers in rural schools, instructors in technician training, and those who teach in home economics, nutrition and other related fields. The training of teachers should not be confined to technical agricultural subjects and methodology for it

is believed to be essential also to include training in the techniques of communication and in the human and social aspects of the cultural environment. Increased attention needs to be devoted to educational facilities, textbooks and teaching materials and to new forms of teaching aids and communication. This is a field in which international agencies and other bodies could most usefully collaborate.

5. Active partnership and cooperation between the different ministries, institutions and organizations involved in the improvement of systems of agricultural education and training should be formulated. The Conference also stresses the importance of more effective partnership between non-governmental organizations on the one hand and agencies and governments on the other in planning and execution of programs in agricultural education and training.

6. Since the most important results of the Conference are expected to emerge as the result of follow-up action taken by Member States, it is imperative that national governments, international agencies and other bodies implement action based upon the findings of this Conference in a closely coordinated manner. Practical implications of these findings should be further discussed at regional and national seminars and meetings.

Summary

Perhaps the most significant outcome of the World Conference was the process itself. If the three international agencies, FAO/ILO/UNESCO, with all the attendant bureaucracy, can demonstrate the ability and capacity to successfully collaborate on worldwide problems of agricultural education, there is reason to be encouraged.

The final recommendation suggested a Second World Conference on Agricultural Education and Training be convened before the end of the Second Development Decade. The experiences of the First World Conference should prove most valuable in this venture.

To have agricultural education recognized as a major ingredient of social, economic and cultural development is as challenging as it is rewarding.

THE EFFECTS OF A YOUNG FARMER TOUR

Glen Davis
Vocational Agricultural Instructor
Sweetwater, Oklahoma

According to the United States Census of Agriculture the average age of the farm operator in the State of Oklahoma is nearing the middle fifties with close to one-third of these being over 65 years of age.

Faced with these facts, the problem of directing young men into farming and encouraging those young men trying to get established, has become acute in the State of Oklahoma as well as the nation as a whole. Due to these conditions there has been an increase in the efforts of vocational agriculture teachers and educators in Oklahoma to organize these young farmers.

As a means of trying to ignite a new enthusiasm, Dr. Robert Price, Agricultural Education Department, Oklahoma State University, organized a tour of Texas Young Farmer Chapters in conjunction with Kansas State University.

The major purpose of the study[1] was to ascertain the effectiveness of this tour in upgrading the nature and extent of young farmer programs in Oklahoma. Responses from 24 vocational agriculture teachers and agricultural professionals from Oklahoma who participated in the tour were secured approximately one year after the tour was completed. It was assumed that one year after participation in the tour, teachers could recognize the nature and extent of benefits derived from their participation. Two hypotheses were examined: (1) that substantial improvement had occurred in the educational programs with young farmers and adults in departments having a vocational agriculture teacher participate in the tour; and (2) that the majority of teachers making the tour and not having young farmer chapters in operation would achieve a local organization within one year after the tour.

Results of the study clearly indicated acceptance of hypothesis number one. For the most part, teachers indicated that the work of their functioning chapters had been greatly improved since returning from the tour. Considerable evidence was found in the expressions of teachers that their chapters were operating on a more democratic basis with involvement and responsibility assigned to and accepted by the rank and file of chapter members. Following the tour, several chapters adopted a constitution and specified the purposes of their organization. Each of these programs had incorporated ideas from the Texas Young Farmer Tour. Hypothesis number two regarding the organization of Young Farmer Chapters by participants not having chapters at the beginning of the tour must be rejected. The same number of functioning chapters was reported after one year as prior to the tour. One chapter had been disbanded with one new chapter being organized. It was evident, both from observation and through a consideration of the results, that a state organization was needed. Since the material for this study was gathered, a state organization has been formed and chartered under the laws of the State of Oklahoma. Much credit for this state organization must be given to the participants making the tour. It is recommended that tours of this type be arranged in the future.

[1]Davis, Glen, "A Study To Show The Effects of a Texas Young Farmer Tour on Programs of Oklahoma Participants." Master's Report, 1970. Oklahoma State University, Stillwater, Oklahoma.

News and Views of NVATA

JAMES WALL
Executive Secretary

Dan Lehmann, National President of the FFA accepts a check for $1,000 on behalf of the National FFA Foundation, Inc. The check was presented by NVATA president, Glen McDowell, to the Foundation at a Board of Trustees meeting in Washington, D.C. On hand, left to right, for the presentation were Don McDowell, Executive Director of the FFA Foundation; John E. Streetman, First Vice Chairman; Fred Stines, 1971 Chairman; and L. W. Davis, Past Chairman of the Foundation Sponsoring Committee.

Here are a few facts about the President's Budget relative to Vocational Education:

- . . . There will be less money for Vocational Education than was available last year.
- . . . It is difficult to determine precise amounts of Federal Funding as Vocational Education Components are scattered throughout the budget.
- . . . The budget picture is complicated by Nixon's proposal for revenue sharing.
- . . . Under the revenue sharing plan state and local governments would receive $16 billion, with $5 billion in the form of *general revenue* sharing with no "strings" attached. The $11 billion would be in the form of *special revenue sharing*. States would be able to spend all the money in any one of 6 areas including elementary and secondary education, or divide the money among 6 areas as they desire. The six areas are: urban community development, rural community development, elementary and secondary education, manpower training, law enforcement, and transportation.
- . . . The President will again submit to Congress legislation to reform the structure of the Manpower Programs.
- . . . The amount budgeted for the Vocational Amendments of 1968 is approximately $60 million less than for the last year.
- . . . If the President's budget and legistive proposals are enacted, for the first time in more than 50 years there will be no Federal funds specifically earmarked for Vocational Education — in effect the 1968 Vocational Amendments would be eliminated.
- . . . It is conceivable that the concept of revenue sharing could eventually eliminate Vocational Education from public education in many communities.
- . . . The House Subcommittee on Appropriations will start hearings around mid-February on the Office of Education budget.

Following is a suggested course of action:—

- . . . Inform the members of your association and other interested people, regarding federal funding for Vocational Education.
- . . . Inform Members of Congress about current programs and advise them of future plans and needs.
- . . . Determine what might happen in your state if all categorical funding for Vocational Education is eliminated. Will Vocational Education survive in the "battle for funds" at the State level?
- . . . If your Congressman or Senator is on the Appropriations Committee, take immediate steps to contact them.
- . . . Keep the NVATA advised of your activity.

Book Review

TURF MANAGEMENT HANDBOOK by Howard B. Sprague. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1970, 253 pp., $6.95.

This book covers practically all of the problem areas that would be taught in a turf management course. The important areas of soil, fertilizers, grass management, weeds, insects, diseases, planting, care of turn, and turf varieties and species are included in the Handbook. Each chapter is well illustrated with up-to-date pictures and figures. A comprehensive schedule of turf management practices is included in the final chapter. All of the material is organized on a psychological basis — the way most people think about practical problems in turf management.

Dr. Sprague is the former Head of the Agronomy Department and Chairman of the Plant Sciences Division of the Pennsylvania State University. He is a Past President of the Crop Science Society of America, the American Society of Agronomy, and the American Forage and Grassland Council.

The *Turf Management Handbook* would make an excellent text and reference for high school and junior college classes in vocational horticulture. Adult class students and hobbyists will find this book easy-to-read and full of important information. It could serve as a student text for a beginning course in turf management.

Paul E. Hemp
University of Illinois

NEWS TO ME

This notice was received too late to include in the list of Teaching Assistantships in the January issue. MICHIGAN STATE UNIVERSITY—Teaching Assistantship; 12 mo.; Sept.; ½ time; doctoral; $350-400; teaching and advising students in Ag Production; apply by July; Institute of Ag. Tech., 120 Ag Hall, M.S.U., East Lansing 48823.

Young blacks enter the 70's with a larger but still lagging share in the American economy. Young blacks have made gains in the amount of formal schooling completed. The proportion of blacks graduating from high school each year has been rapidly rising and the educational gap between blacks and whites is narrowing. But the unemployment gap between whites and blacks who leave high school each year has not closed. In 1960 the black unemployment rate was about twice the white unemployment rate, and in 1968 this rate continued to be about doubled.

Well over 1,000 people every year leave their own countries under a fellowship program for raising educational standards, spreading specialized skills and helping to promote appreciation of other cultures, in one of UNESCO's longest established yet least known activities. The program began in 1948, two years after the Organization was founded. Today, close to 1,200 fellowships are granted every year in fields ranging from electrical engineering to the creative arts, and for periods running from a few weeks to three years. Nearly half of these fellowships have been in the field of education, particularly teacher training and educational planning and administration. The United Kingdom is the country which accepts the largest number of Unesco fellows, followed by France and the U.S.

— UNESCO FEATURES

The number of workers in the prime 25-34 year old group will increase dramatically in the 70's. They will be better educated than workers of the same age group in the 60's. In 1965, 41% of the civilian labor force age 25-34 had 4 years of high school compared to 46% by 1975. Only 28% of the 1965 labor force had some college education compared to 33% in the 70's. Thus, there is a combined education total of about 10% greater in the 70's. Along with more education, these people will generally bring to the workplace higher occupational aspirations and expectations, more innovative and creative interests, higher mobility and an eagerness for greater participation in decision-making at the workplace.

—U.S. Manpower in the 1970's
—U.S. Dept. of Labor

U.S. exported a near-record $6.6 billion worth of farm products to foreign customers in 1970. This represents a fifth of world agricultural exports and, for U.S. farm exports, a rise of 16 percent from 1969.

Illinois is our largest single exporter of agricultural products, accounting for $650 million — nearly a tenth of the total. This state is first in soybeans, feed grains, protein meal and soybean oil, as well as an important shipper of wheat, lard, tallow, meats, and hides and skins. Ten states accounted for ⅗ of U.S. agricultural exports. They were: Illinois ($650 million), Iowa ($505 million), Texas ($422 million), North Carolina ($406 million), Kansas ($304 million), Arkansas ($296 million), Minnesota ($276 million) and Nebraska ($270 million).

For seven major agricultural products —wheat, rice, soybeans, tobacco, cotton, cattle hides, and tallow — our exports equaled one-third to two-thrids of the year's production. Production from about 1 of every 5 harvested acres goes abroad, and the U.S. farmer gets about one seventh of his income from these exports.

—The Farm Index
December 1970

The rate of productivity growth dropped in the late 1960's. Increasing productivity will reduce inflationary forces, increase our output of goods and services, raise purchasing power, and help raise living standards. The productivity of the U.S. worker is still the highest in the world. But the growth in U.S. productivity has generally been below competing nations such as Canada, France, Germany, Italy, Japan, Netherlands, Sweden and the United Kingdom.

The Department of Health, Education, and Welfare has been requested to prepare a memorandum on vocational education. Six basic questions were posed in the request:

1. What are the strengths and weaknesses of current vocational education programs? To what extent do the weaknesses reflect administrative shortcoming rather than unsatisfactory legislation?
2. What is the proper relationship between vocational education and other federal programs, particularly in manpower and higher education.
3. How can federal vocational education programs best reflect the administration's interest in (a) the 'income strategy,' (b) the New Federalism and (c) the blue collar worker?
4. To what extent could substantial improvements in vocational education be made within current levels of expenditures?
5. How can federal vocational education programs best serve as a catalyst for reform in the often moribound state vocational educational agency without violating the principles of the New Federalism?
6. How can the longstanding conflict that exists between HEW and the Department of Labor in this field be eased, and administration of federal vocational education programs be correspondingly simplified?