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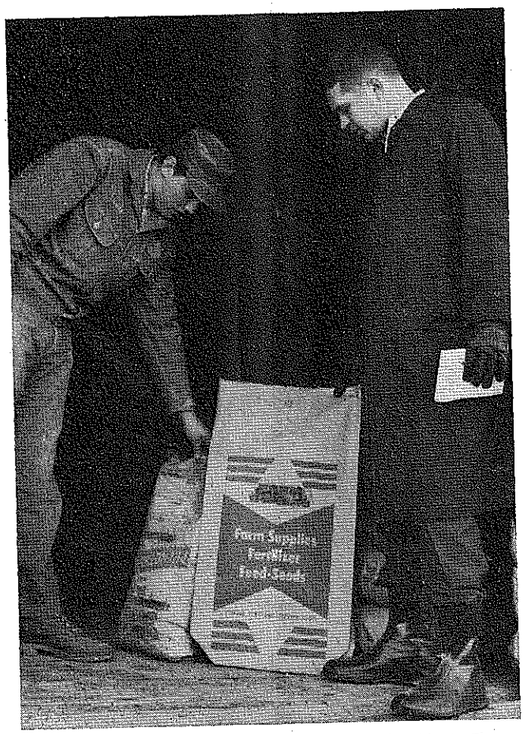

Agri-business student Ernest Reeder discusses work with J. Thomas Weyant (right), coordinator of the Agri-Business Pilot Project in Pennsylvania. Reeder has been employed by a Farmer Cooperative for 1½ years. A senior at Shippensburg High School, he worked full-time for the cooperative during the summer following his junior year. (Article page 55)

Featuring

The New Occupational Mix

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Editorials

The New Occupational Mix

Everyone (nearly) agrees that some changes are needed to help us "see" and develop programs for occupational education. Furthermore, nearly everyone agrees that the old categories of vocational education—Ag, DE, HEc, etc., are no longer adequate. Furthermore, the traditional lines of any one category need some adjustment. In vocational agriculture, we are concerned with agricultural occupations including farming, but much more than farming. However, when each of the traditional areas of vocation begin to expand, there is likely to be overlapping. For example, Sales and Services for Agricultural Equipment is a large and growing occupational field. Is this Ag or DE? Of course, this question bothers some of us more than it does the young man interested in securing the training he needs to succeed in this field. But it is a real-life question to leaders in vocational education and must be answered.

Apparently, there are many answers to such questions of broadening and overlapping of traditional programs in vocational education. This writer would like to suggest as a possible guiding principle the following statement in developing local programs of vocational education: *Try to ascertain the vocational education needs of the people in the local school district, adults as well as those in schools.* Begin (as the Vocational Education Act of 1963 suggests) with an analysis of the occupational education needs of "everybody". *Then develop the program of vocational education which will come nearest meeting these needs.* Such a program would likely be a combination of the traditional programs rather than trying to offer all of these separate programs. This means that in many situations a teacher of vocational agriculture (since he is frequently the only vocational teacher already there) may need to include areas other than agriculture. (Such as Sales and Services, as mentioned earlier.) However, it is extremely important to observe two points in developing such a program. *First,* if the broadened program overlaps another vocational field, official request should be made for securing a teacher in this field. (In DE, in the example used above). *Second,* if the teacher in the related field cannot be secured, in-service training for the teacher, *by the people in the related field,* should be mandatory. Again using the example above, the teacher of vocational agriculture expected to handle the teaching for Sales and Services of Agricultural Equipment would receive in-service training from DE people rather than Ag Ed people. Some are doing just this, but not enough.

Unless some such considerations are given to these broadened areas of teaching, we will have "everyone teaching everything". If this happens this writer believes that vocational education will lose its greatest single asset—qualified teachers for specialized areas of education.

Why Off-Farm Agricultural Occupations

Much is heard these days about including Off-Farm Agricultural Occupations in vocational agriculture. National, regional and state conferences have been held. Many research projects, some on a statewide basis, have been conducted. Pilot projects have been planned and done. Reports have been written and distributed. Workshops and short courses have been held for teachers. Thousands of man-hours have been devoted to the subject of Off-Farm Agricultural Occupations. *Why?*

Apparently there is a general feeling among leaders in Agricultural Education that the answer to this question of *why* is already in. However, in reading the materials available and discussing with as many leaders as possible, there seem to be several rather different answers. This is possible, of course. If you are trying to sell something, it is good if the article for sale can indeed meet many different needs. For example, if you are selling

(Continued next page)

Cayce Scarborough

Theory And Practice

Teachers have been recognized by most state and national leaders as "the key" to vocational agriculture. Yet, these same teachers have *not* been given an official and responsible place in many state and national programs. Even in programs that could not exist at all without teachers, such as the FFA, there is often not a single teacher on the official governing bodies of the state and national associations. Long-time friend Leo Knuti gives emphasis to this matter in his article in this issue. As one newspaper columnist says, "Wish I'd Said That."

JOHN HOLCOMB
ASSOCIATE PROFESSOR
DEPARTMENT OF AGRICULTURAL EDUCATION
TEXAS A&M UNIVERSITY
846-5764 COLLEGE STATION, TEXAS

How do you like the idea of a calling card, as shown above? I have known one Vo Ag Teacher who had calling cards made. Seemed to work well, and besides, he won a prize in Exchange of Ideas too. Maybe you have a better idea going along this line. Let me hear.

The biggest news reported from one of the national conferences on Agricultural Occupations was the use of the term *modules.* Details surrounding the conception and birth of this new term are unknown. The best that we can tell is that it is a 1965 term for Teaching Unit. Other terms used to denote the same thing are Resource Unit or Source Unit. The writer had some lively correspondence on the use of these terms with the late George Deyoe shortly before his

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Why Off-Farm Ag Occupations?

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a tonic you put on the label a large number of different symptoms which this tonic will cure. (Do you feel tired, run-down, can't sleep, worried, discouraged? Take three tablespoons after each meal for 30 days. Buy the large economy size.) So, it appears from what is seen and heard that Off-Farm Agricultural Occupations will cure many of the ailments of vocational agriculture.

Is this expecting too much from one single tonic? I believe that it is. Just as there are testimonials of wonderful cures by any tonic selling enough to stay on the market, no doubt the addition of Off-Farm Agricultural Occupations will help some programs of vocational agriculture. But I doubt if this is a cure-all for whatever may ail a program of vocational agriculture. I do not know of anyone who is making such a claim. However, I do believe that we in Agricultural Education tend to jump on the current bandwagon (Farm Mechanics, FFA, Farm Management, to name a few bandwagons passing by in recent years). This is not meant to be an appeal to ignore new ideas, nor even to discourage developing one to the bandwagon stage and trying to get everyone to climb aboard. It is simply suggesting that we should raise the question of *Why*, and secure a satisfactory professional answer for ourselves before climbing aboard the bandwagon.

Let's take one of the answers heard fairly frequently and examine it in light of a local program of vocational agriculture. That is, that Off-Farm Agricultural Occupations be added to Farming as an occupational objective for those enrolled in vocational agriculture. Then we would have, if my logic is sound, *Agricultural Occupations*, as the occupational objective for anyone enrolled in vocational agriculture. How does this differ from the basic purpose stated nearly 50 years ago in the Smith-Hughes Act? Not much. Largely in up-dating the concept of agriculture to include more than farming, which it has for many years.

When this concept is put into practice as part of a local program of vocational agriculture (and where else can the concept be implemented?) there are a number of sizable problems to be solved. Most of these bear down on the local teacher of agriculture. *First*, what does the teacher *omit* from the program? In the classroom with boys, in work with adults, in the community, and the thousand and one other activities the teacher crowded into last year. Who will authorize the dropping of these activities so that the teacher will not feel that he is neglecting his professional responsibilities? *Second*, is the teacher able to make this major change for himself and the local program? Major changes are not usually easy for anyone to make, particularly if our own experiences have not touched the new areas.

If a teaching program is to be changed, this means we have a curriculum problem. Curriculum changes are not easy. Help from a specialist is often needed. Basic problems include, determining specific outcomes to be expected; grade level; amount of time to be spent in various areas; learning experiences to be provided; evaluating; relating to other areas of the course and program.

Finally, perhaps the number one problem, how does this program fit into the objectives of those enrolled? This is another area in which it is "easier said than done". Since we are here talking about vocational education, this means that the objectives should be *occupational objectives*. For the adult, this is frequently a difficult problem, but for the teen-ager it is a problem that cannot and should not be "solved" at this time. That is, in the sense of stating a specific occupational objective for which he is in training. This is obvious if you look at the theory and research in vocational maturity and vocational development. So, when the local teacher of agriculture looks closely at the real live people he has enrolled in his classes, he has the large question of what to teach these people in Agricultural Occupations. The basic guiding principle in seeking an answer to this tremendous question would seem to be indicated in the term "suitable" occupational education. This is clearly indicated in the last part of the Declaration of Purpose of The Vocational Education Act of 1963, as follows: "—and which is suited to their needs, interests, and ability to benefit from such training."

Theory and Practice

(Continued from page 51)

death. Many of you will recall that George had a strong interest in the *content* of a course. Many years ago, about the time he moved from Michigan State to University of Illinois, he was developing materials on what he called a *Resource Unit*. His interest was in helping teachers prepare needed subject matter in teachable form, yet in such a way that the same Resource Unit might be used for different situations. Thus, a teacher would have adequate and documented subject matter ready at hand, yet not be compelled to prepare an entirely different set of resource materials for each group studying in the same subject area.

It would appear that the *module* serves this same purpose in developing a course in vocational agriculture. If so, the question arises, why a new term? Perhaps a new term is more dynamic, at least it may have more sales appeal. It is said that much research goes into the naming of a new product whether an automobile, soap or toothpaste. Some of these carry built-in connotation for certain appeal, such as, *Mr. Clean, Gleam, Head and Shoulders, Mustang, Right Guard,* etc. Other products have caught the fancy of the buyer with such plain names as Smith Brothers Cough Drops.

The Editor promises to furnish equal space to the creator of the term *module* to clarify the confusion created by this editorial. It may be that everybody else understands the reason for the new term. If it can be explained how this term will help us become better developers of courses in vocational agriculture, the Editor further promises to support the use of the term. It is the belief of this writer that we need all the help we can get in developing educationally sound curricula in vocational agriculture.

Interesting items can be found on most pages of this magazine, even the Index. For the past two years we have had *two* articles on *Occupational Experience* (both from California), and 25 articles on *FFA*, in this magazine, according to the Index in the August issue.

Cayce Scarborough

Letters to the Editor

Dear Editor:

The editorial on Our Responsibilities for International Education in Agriculture is a challenging analysis of the importance of agricultural education in our world situation.

I agree with the point of view that one of our major objectives in the United States is to promote the freedom, well-being, and progress of all mankind in the world and secondly, that we in agricultural education have a great opportunity to disseminate research into teaching for people in other parts of the world.

It is essential that all mankind in the world be able to have enough food and fiber for the well-being of our people. We must assist in the elimination of the condition now causing more than one-half of the people to go to bed hungry each day.

It is imperative that through agricultural education, we make contributions to the ways and means to free this one-half of the world from this terrible want for food enough to live.

I believe that through proper agricultural education, we can do more to alleviate the strained conditions and conflicts in the world through improving the food situation than through any other way on a world-wide basis.

My six months of working with agricultural education in Formosa in 1954 convinced me that we have much that can be done through agricultural education on a world-wide basis.

Harry E. Nesman, Chief
Agricultural Education
Michigan Department of
Public Instruction

Dear Editor:

Having spent two years in a foreign country as an agricultural consultant, I would like to compliment Dr. Harry Kitts for his guest editorial which appeared in the May issue of the magazine. Frankly, I think he has a "tiger by the tail." While I agree that more teachers of agriculture should and could be of great service to our country as agricultural advisors, I do not agree that our teachers have very much of a chance of being selected for these positions. I know of only a few who have been fortunate enough to be selected. These men, for the most part, have made valuable contributions.

What we need is a conference of agricultural educators who have served in a foreign assignment to design new programs to utilize the imagination and ingenuity which is characteristic of our teachers of agriculture. What could be more fitting for those in agricultural education who have contributed so greatly to the solution of the American agricultural problem than to be asked to join a continuing crusade to help other countries solve their agricultural problems?

Sincerely,
Gene M. Love
Associate Professor
Penn. State Univ.

Dear Cayce:

Find attached an article for the Agricultural Education Magazine. Please edit it as you wish. I won't be heartbroken if you can't use it.

Sincerely,
Leo L. Knuti, Head
Agricultural Education
Montana State College

Ed. Note: This is the kind of letter (and article) that keeps the Editor from being heartbroken! Thanks, Leo.

Dear Editor:

Your editorial on "Planning the Use of Time For Vocational Agriculture Teachers" reminds me just how far behind Vocational Agriculture teachers do get on jobs that need to be done. It is our tendency to get so involved in non-essential activities that we fail to take care of the essential job of being a good Vocational Agriculture teacher.

I agree that wise planning is the key being used by successful and skillful teachers. Just as good classroom instruction is based on good planning, so should the wise use of our time be well planned.

A teacher who has spent many years in the same community is often the one who becomes too busy. This happens for two reasons, first, because the community recognizes his ability and asks more of him and, secondly, because many of the important activities of a few years ago are of little importance today. We are all hesitant to give up tried and proven projects, even in our F.F.A. work. As the subject matter which we are teaching is changing in importance, so should our activities change to better meet the changes in our communities. We are prone to develop new activities and still try to hold on to the old ones. As we budget our time for the year ahead, perhaps we should take a long look at activities that should be discarded in favor of new ones that demand new time.

"A Good Executive is one that can Delegate Responsibility". Responsibility given to Future Farmers develops leadership and helps prepare them to be responsible adults. Assigning jobs to these boys creates interest, is good training for them and relieves the teacher to take care of more important activities.

I agree with each of the eight points presented in your editorial and would like to add the ninth. *Save some time for your family.* Your family needs some of your time as does the highest priority job in your teaching. We can let ourselves get so involved in our job to exclude them and it is not meant to be that way. Your family needs you and you need them in order to do the best job of teaching.

Thomas L. Devin
NVATA, Region II
Dumas, Texas

Dear Mr. Editor:

Louis Sasman's article on agricultural education in Egypt describes elements that are common to many other developing countries. The parallels are so close that they deserve recognition as problems with special study by Americans if, indeed, we are to be relied upon as a competent source of consultative assistance in such countries.

In the agricultural schools of many countries, the incentive and reward system fails to reward good performance in agriculture or its practical work. The largest incentives and the biggest rewards are given to those who use the school as a stepping stone away from the practical problems of managing agricultural production. Such schools are frequently second-rate secondary schools for city boys who fail on admission examinations to get admitted to first-rate secondary schools. Neither are they first-rate agricultural schools whose incentives and rewards are offered to those with agricultural knowledge and skill and whose future will employ this foundation.

Sasman's article describes some of the frustrating barriers to success in agricultural technical assistance. More articles of this kind may alert our attention to agricultural education's international component and the special problems thrust upon agricultural educators when called upon to accept an overseas assignment.

Sincerely,
Gordon I. Swanson
Professor & Coordinator
International Programs
University of Minnesota

Dear Editor:

Gordon Bloom's article — "Graduate Courses for Beginning Teachers — Friend or Foe" was timely and well written. This is one of the problems for which advice is most frequently sought from teacher trainers and supervisors.

In Missouri it would be the exception rather than the rule for a teacher to spend only one week in graduate work even though some vacation time is relinquished. Summer activities customary in the community, the amount of contacts needed for a successful beginning, and other factors peculiar to the school and community may carry more weight than several of the advantages mentioned in the article.

No doubt, graduate work should start at the earliest feasible date but the first full summer living in the community is a questionable time to start.

Gordon's statement in the last sentence is one of the best answers; and I quote: "In all instances, one's decision should be made only after carefully planning one's total summer schedule and discussing it with the administrators of the school."

Robert L. Hayward
Assistant Supervisor
Missouri

E. F. Wilson

In Virginia

Training Provided In Agricultural Distribution

Pilot Program

Morris Witten

E. F. WILSON, Teacher of Vocational Agriculture, and
MORRIS WITTEN, Distributive Education Coordinator,
Wytheville, Virginia

Vocational training for agriculturally related-distributive occupations is a new venture in Virginia. A survey made in 1963 in the area served by the George Wythe High School, Wytheville, Virginia, revealed the need for such training. This survey had several unique characteristics. *First,* it was initiated by the Head of the Vocational Education Department, Virginia Polytechnic Institute, with the enthusiastic support of the state supervisors of agricultural education and distributive education. *Second,* those who participated in the detailed planning and making of the survey included the Head of the Vocational Education Department, Virginia Polytechnic Institute; the Superintendent and Director of Instruction for the Wythe County Schools; the principal, guidance counselor, and teachers of vocational agriculture and distributive education at the George Wythe High School; and members of the agricultural education and distributive education staffs at Virginia Polytechnic Institute.

Sixty-one agriculturally related-distributive businesses in the Wytheville, Virginia, area were surveyed by members of the agricultural education and distributive education staffs of Virginia Polytechnic Institute in cooperation with the administrative and teaching staffs of the George Wythe High School. Data were gathered by interviewing the manager of each of the firms. The 61 firms included in the survey employed 1,708 persons and needed 128 additional employees at the time the survey was made. Officials of these firms expected to increase the employees by 7½ per cent within the next several years besides filling vacancies as they occurred.

The need for providing training for workers in these businesses was indicated by the fact that officials of the 61 firms reported they experienced difficulty filling more than one-third (36.4 per cent) of the jobs in their firms.

The employers also stated that nine-tenths of their employees needed training in both agriculture and distributive education.

The economy of Wythe County, Virginia, is basically agricultural. A large percentage of the young people left this locality during recent years to obtain employment. Therefore, it was no surprise to those concerned when the findings of the survey revealed that a great need existed for training which would qualify persons for employment in agriculturally related-distributive businesses.

The researchers also found that opportunities were abundant in the Wytheville area for providing practical training for career workers in agriculturally related-distributive businesses through part-time and

Training Program Developed

The same persons who participated in planning the survey also participated in the development of a program to provide the kinds of training that the findings of the survey indicated were needed. The following is a brief description of the course:

Title: Agricultural Distribution.

Length: Two years.

Credit: One unit of credit each year.

Students: The first-year course is open to sophomores and juniors. The second-year course is open to juniors and seniors who have completed the first year of the two-year course.

Purpose: The course is designed to meet the vocational needs of those students interested in preparing for career opportunities in agriculturally related-distributive business. It is for those individuals whose needs are not being met by the regular high school vocational agriculture and/or distributive education courses.

Enrollment: Enrollment is limited to not more than 15 students per class.

Selection of Students: Eligibility is determined by a committee consisting of the guidance counselor, vocational agriculture teacher, and distributive education coordinator.

Supervised Practices: Appropriate directed work experience or supervised practice will be arranged for each student enrolled.

Content: The content of the course is designed to help the student gain the knowledge, skills, and attitudes needed for successful entrance into occupations in agriculturally related-distributive businesses.

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James Hudson, a sophomore, Charles McPhotridge, a junior, and Walt Kilby, a sophomore, practicing stocking procedures studied in Agricul-

Norman K. Hoover

Three Years' Experience

An Agri-Business Pilot Project

In Pennsylvania

J. Thomas Weyant

NORMAN K. HOOVER, Teacher Education, The Pennsylvania State University; J. THOMAS WEYANT, Distributive Education, Pennsylvania Department of Public Instruction

Approximately 400 vocational agricultural students in 25 Pennsylvania high schools were introduced to agri-business during the 1964-65 school year, and some 130 (5 plus per department) were placed in agricultural businesses for supervised occupational experience. They were involved in a pilot study in which "An Introduction to Agricultural Business and Industry" was the central theme.

This three-year agri-business pilot project, initiated in August, 1962, was an exploratory program for years. Now in its final phase, the project represents one solution to a pressing rural educational need. Through application of principles of distributive education and work experience to their vocational agriculture program, these boys have been directed into agricultural occupations. The occupations are in agricultural farm services and in marketing and distribution of farm products.

Pilot Project Goals

1. To develop a cooperative Vo Ag—DE program.
2. To provide training opportunities in marketing and distribution for rural youth.
3. To determine the feasibility of creating a statewide program of this type in rural areas.
4. To test a cooperative Vo Ag—DE program in area vocational schools.
5. To determine the amount and kind of training needed by vocational agriculture instructors to enable them to prepare students for positions in marketing and distribution.

Getting the Project Underway

A productive agricultural area identified with active all-day and young-adult vocational agriculture programs was selected for the project. Three high schools with two-teacher departments of vocational agriculture, well qualified instructors, and comprehensive programs were chosen. The schools selected were Chambersburg Area Joint High School, Chambersburg; Cumberland Valley Joint High School, Mechanicsburg; and Shippensburg Area High School, Shippensburg. The teachers had no special training in distributive education and were not expected to teach any agri-business subjects during the project. They were, however, expected to help with the project in an advisory capacity. J. Thomas Weyant, a teacher with experience in both business education and distributive education, was employed as project coordinator.

As the project got underway, a survey was conducted to determine placement opportunities and cooperating businesses. Students were interviewed to determine interest in this type of training program. Vocational agriculture students who expressed interest were selected on the basis of:

1. At least 16 years of age.
2. Completed high school grade 10 or 11.
3. Interest in the program.
4. Lacking means to enter production agriculture.
5. Demonstrated ability to profit from this kind of training.

The First and Second Years

The students selected for the pilot study scheduled vocational agriculture. Two of their 10 periods per week were taught by the project coordinator. They were also scheduled for a minimum of 15 clock hours of occupational experience per week, outside of school time. During the first year, 11 boys were placed in feed and grain cooperatives, farm machinery dealerships, dairies, meat packing plants, and greenhouses. An average of 11 hours of actual work experience was attained during the first year for which students were reimbursed at the minimum student-learner wage.

The instruction received within the school from the project coordinator included job seeking and interviewing information, legal requirements of a job, creating and maintaining good human relations, functions of selling, and a brief review of business English and arithmetic.

The curriculum for the second year was similar to that of the first year, but included information about agricultural occupations and the marketing of farm products. Enrollment for the second year was 17. The following report at the end of the second year reflected the opinions of the project coordinator, the teachers of agriculture, and school administrators in the three schools.

General Outcomes and Situations

1. In most cases grades in other subjects of students taking agri-business held steady or improved over previous years.
2. Disciplinary problems involving these students were greatly reduced in every case.

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Some Agree

Vocational Education For Tomorrow's Agriculture

Some Don't

ROY E. HUFFMAN, Dean of Agriculture, Montana State College

Public education in the United States has been more comprehensive and inclusive during the past century than in any other nation. Scientific and technological achievement as reflected in the level of living of the population indicates that American public education has been highly successful. The success of public education in the United States has resulted in reluctance to consider change in the existing system. Rapid changes in the economy and society strongly suggest that changes are also needed in the educational system.

Vocational education is receiving major attention at the present time in considerations of the total educational needs of the nation. As a part of these considerations, the future of vocational agriculture is of major concern. When the Smith Hughes Act was passed by the Federal Congress in 1917, more than 30 percent of the population in the United States was actively engaged in the business of farming. Now, it is estimated that only about 7 percent of the population is engaged in farming. At the same time, about 40 percent of the gainfully employed in the United States have jobs in the broad field of agriculture including supplies and services to farming and the transportation, processing and marketing of agricultural commodities in addition to farming itself.

These changes in employment do not tell the whole story. The individuals employed in farming and in agri-business are involved in a vastly different kind of agriculture than was the case in previous years. It is a more complex and demanding agriculture in terms of the needed scientific knowledge, technological skills and management abilities. It seems obvious that a program of vocational education designed in 1917 will not be adequate to meet the needs of the agricultural economy 50 years later.

high schools has been a highly successful educational program and has made major contributions to the economic development of the United States. The associated Future Farmers of America program has done much to develop leadership among young men in rural areas. The success of these programs has resulted in considerable reluctance on the part of many teachers and others concerned with vocational agriculture to take a critical look at how well this kind of education fits our rapidly changing agriculture.

In an attempt to secure objective and constructive consideration of the problem, the Division of Agriculture at Montana State College joined with the Department of Public Instruction of the State of Montana and the Montana Vocational Agriculture Teachers' Association in conducting a seminar on the overall theme of "Vocational Education For Tomorrow's Agriculture." The Seminar included papers on agriculture in perspective, career outlook for rural youth, trends in vocational education, vocational agriculture in the high schools, vocational agriculture beyond the high schools, distributive education and agriculture, a case study of agri-business in a high school, and extension's role in education.

Modifications Needed

The need for modifications in the Vocational Agriculture program to recognize the growing importance of agri-business was emphasized frequently in the presentations at the Seminar and in the accompanying discussions. There was far from complete agreement on the various aspects of the needed modifications.

The Seminar was concluded by securing the reactions of the participants to a series of questions. Some of the questions were prepared in

Robert Jibben

ROBERT JIBBEN,
Bristol,
South Dakota

Learn From Others

The remark is often made that two heads are better than one. In our job as Vocational Agriculture Instructors I believe this axiom can be enlarged to "*many heads.*" Look around the community that you live in and see if you can name the organizations and business firms that are serving agriculture. Now question yourself: Who is the head of each organization or business? Do you know him? When was your last visit with each one? Could he be of help to you in teaching?

Each organization or business in the community plays a vital role to the farmers of your area. If they don't, they don't exist very long. Most organizations in the communities where we work are specialists in their field and work closely with individual farmers. They are acutely aware of problems and needs of farmers. Most of them have good ideas as to what should be done to improve the farmer's operation and are aware of the shortcomings of the farmer.

Financing, insurance, government regulations, marketing channels, soil conservation, to name a few might be some of the areas farmers lack information. Taking time to meet with these organizations and discuss our common field of work can be a valuable aid in teaching. We need to be aware of the needs others see in the problems of farmers in our area. These problems can make excellent class projects and by using problem solving techniques will help young people in any phase of life. These same techniques can be applied to young and adult farmer classes and used quite successfully. No teaching tool is as valuable as one that is of local origin.

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Teachers Must Work With Counselors

Charles L. Stipe, Teacher of Vocational Agriculture, El Campo, Texas

Charles L. Stipe

Teachers of vocational agriculture who have not worked with counselors in making follow-up studies have overlooked one of the best professional experiences available. This is my opinion after working the past year with Edwin Lowe, counselor in our school, in conducting such a study.

I have never engaged in an activity that has been of more interest to other teachers, administrators and parents. We were asked from the time the first questionnaire was returned until now, "What are they saying?" "How did they respond to item number——?" Why so much interest? Because all teachers were requested to participate. The purpose of the study was explained to all teachers in the system and each was given an opportunity to submit items to be included. Naturally this required a great deal of work to organize and consolidate items to be used in formulating the questionnaire, but, I firmly believe the favorable response was worth every ounce of effort required.

What are the retrospective views held by graduates of guidance, extra-curricular activities, the various academic subjects, and so on? Where do students go, what do they do and how well do they achieve? These were the major questions we wanted answered, but we felt we needed help. We discussed the problem with Dr. Earl Webb, Texas A&M University, and he agreed to serve as consultant. Therefore, with his help we were able to code the questionnaire for processing by the Data Processing Center at the University.

We selected the 1959 graduating class for the study. This group of 138 graduates was insufficient to draw any firm conclusions but adequate, we believe, to provide some evidence for further investigations and to provide experience for future studies.

The purpose of the study was to enable school personnel to evaluate the present educational program and to make changes needed to better prepare students to cope effectively with problems encountered after graduation from high school. Questionnaires were mailed to the 138 graduates of the 1959 graduating class. Many respondents took time to write letters commending the school for making the study and offering suggestions.

The major findings are summarized as follows.

1. **Learning to get along with others was considered to be the most important experience gained in high school.**

2. **The value placed on subject matter areas was directly related to employment responsibilities. Girls working as secretaries rated English higher than girls employed in occupations where less language usage was required. Boys who completed vocational agriculture and were farming placed a higher value on the subject than those in non-farming occupations.**

3. **Girls placed a higher value on English than boys; however, the reverse was true for mathematics.**

4. **Rank in class would have been a reliable indicator for predicting which members of this group would attend and/or graduate from college.**

5. **Loss of interest was the major reason given by boys for dropping out of college. Marriage was the main reason given by girls.**

6. **Helping students solve educational problems was believed to be the greatest counseling need of students, vocational problems were second and personal third.**

7. **About one-half of the boys and two-thirds of the girls had definite ideas about a vocational choice while in high school.**

8. **Walking into a place of business and applying for a job was the main way respondents received their first jobs after graduation from high school.**

9. **Girls tended to be better satisfied in their present jobs than boys.**

10. **It was generally believed by respondents that the counseling service available when they were in school was directed toward the more capable students.**

William A. Smith

Former Editor Retires

William A. Smith, professor of rural education at Cornell University, retired June 30. He was Editor of *The Agricultural Education Magazine* from 1952–57.

For 28 years he has been a specialist in teacher preparation for agricultural education. In 1947 he was named director of the division of extramural courses and became director of the summer session and extramural courses when these two programs were merged in 1958. He will continue his work with the summer session and extramural courses this year.

Professor Smith has taught in the summer sessions of the Universities of Maine, Vermont, and California. Also, he initiated and directed workshops for the training of supervising teachers in agriculture in Pennsylvania, Maryland, Maine, and New Hampshire.

A native of Montmorenci, Indiana, Smith graduated from Purdue University and received both the Master's and Ph.D. degrees from Cornell.

Professor Smith and his wife reside at 609 Mitchell Street, Ithaca.

Wm. J. Brown

Training Program

Dimension Project Underway At Penn State

Landscaping

Gene M. Love

W. J. BROWN, Jr. and G. M. LOVE, Teacher Education,
Pennsylvania State University

Landscape horticulture was identified as an area in Agriculture which will need increasing numbers of trained workers during the next five years. The potential growth in these areas was indicated in a recent occupational survey completed by the Agricultural Education Department of The Pennsylvania State University. The survey indicated conclusively that high school students trained in landscape horticulture can realistically expect to find employment opportunities in either nursery production and sales, greenhouse production and flower shop sales, or in turf establishment and maintenance. The level of skills and competencies needed, however, ranged from high school to college preparation. This indicates that advancement opportunities exist for the individual who is willing to seek additional training.

Innovating Curriculum Changes

Landscape horticulture can become soundly established in a school curriculum if a need exists, facilities are provided, and if specialized curriculum help is provided the teacher. Developing instructional materials and providing inservice teacher education, are examples of the curriculum help needed by teachers.

It is unnecessary as well as inefficient for each teacher wishing to emphasize landscape horticulture to prepare his own instructional materials. A more logical scheme might be to develop instructional materials in a curriculum materials laboratory and then offer teachers an opportunity to learn how to use the units in inservice education workshops.

A project to develop instructional units and the accompanying inservice education workshops in ted to the United States Office of Education, Department of Health, Education, and Welfare from the Agricultural Education Department of The Pennsylvania State University. Funds were made available from Section 4-C of the Vocational Education Act of 1963 to initiate the Project. The official Project title is the Development and Evaluation of Instructional Units in Ornamental Nursery, Floriculture, and Turf Occupations for High School Students and Adults in Northeastern United States. The official project title has been shortened to Project DIMENSION to facilitate communication in letters, articles, etc.

Project DIMENSION is aimed at developing and evaluating instructional materials which increase students' occupational competencies in landscape horticulture and educating teachers in the use of these instructional materials.

Plan of Action

One of the specific objectives of Project DIMENSION is to develop teachers' unit plans and student handbooks. These instructional materials are to be functionally oriented toward vocational outcomes.

In developing instructional materials, advice and information from representatives of industry, subject matter specialists, and educators are essential. With this consultant help, the scope and content of the units being developed can be reinforced, changed entirely, or expanded to be more comprehensive. The Advisory Committee for Project DIMENSION consists of University faculty members, State educational representatives, and representatives from industry. A conference was held in June to help develop the content of the units to be taught and to offer ad- … equipment, teaching sequence, occupational experience needed and other considerations.

After the teachers' unit plans and student handbooks have been prepared, a three-week inservice education workshop will be conducted in July, 1966. During the workshop, the techniques for using the units as well as specialized subject matter will be taught.

Fifty-four teachers, who are interested and qualified to participate in pilot programs, will be selected from the northeastern United States. These teachers will be enrolled for the inservice education workshop and teach the developed units in their schools the following year.

After field testing each unit in pilot programs, the materials will be revised as needed. The revised teachers' unit plans and student handbooks will be disseminated to schools in the northeastern United States and other interested teachers.

The same procedures will be followed in developing additional units of instruction in 1967.

A follow-up study is being planned to evaluate the effect of the training on the ability of students to become employed in the area of landscape horticulture.

In conclusion, landscape horticulture will be a new area of emphasis in many vocational agriculture departments. It is imperative that these areas be included in the curriculum where occupational opportunities exist. As pointed out earlier, these opportunities are widespread. The units and inservice education workshops planned in Project DIMENSION will aid in organizing instruction and preparing teachers to become proficient in an important new field of activity.

Determining

Competencies Needed In Landscape Gardening

Instruction

George E. Yetman

GEORGE E. YETMAN, Head, Landscape Gardening Dept.
Norfolk County Agricultural High School
Walpole, Massachusetts

Traditionally, the curriculum of vocational agricultural schools has been oriented and heavily weighted in the animal sciences. For example, the FFA program has not provided incentives on the State and National levels for recognition of achievements by outstanding students in nursery culture and landscape gardening. Production agriculture in animal husbandry and crop farming has decreased considerably in the Northeast as to the number of farms and jobs available for vocational agriculture trained workers in these fields. On the other hand, ornamental horticultural enterprises and related businesses have increased greatly. More leisure time is being enjoyed by American workers making more time available to spend working on their home grounds. To satisfy the demand for materials for this kind of home improvement and the services to have the work done, many garden centers and landscape nurseries have developed. As a result the need for trained help to work in these growing businesses is very much in evidence.

Leaders of vocational education in agriculture have accepted the challenge of the industry to expand the training offered. More departments are offering units of instruction in landscape design in the secondary schools as well as at the post-high school level.

The curriculum of ornamental horticulture should be guided by the degree of competence in knowledge and skills deemed important by leaders in the horticultural industry. Starting with this basic assumption, a study was made to determine the opportunities for employment for vocational agriculture students, and the competencies employers thought essential for the student worker to obtain through occupational experience. The questionnaire was designed into a format of four sections. Identification of the business, characteristics of employees desired, employment status and competencies which the employers considered as important for holding a job in landscape gardening. Fifty questionnaires were mailed to nurserymen, landscape gardeners, and garden center operators. Forty replies were received within a period of four weeks.

Thirty-six of the respondents replied that they would hire students of vocational agriculture under a cooperative training program. Relative to the number of students the firm might employ, 60 per cent replied that they would employ one or two; 25 per cent stated three or four; 5 per cent said five or six; and 10 per cent were uncertain as to how many, if any, they might employ. Four of the forty respondents stated they would not hire a vocational agriculture student. Thirty of the firms had previously hired vocational agriculture trained students.

Findings

Sixteen competencies were listed including such nursery operations as pruning and shearing, identification of plants, and retail salesmanship. Employers were asked to check the degree of competency and skill desired before placement for occupational experience. Space was provided for comments and listing other competencies they consider important.

Results of the survey revealed that there are many opportunities for students of vocational agriculture to receive on-the-job training through placement with landscape gardening, garden center and nursery firms in eastern Massachusetts. However, there is a definite trend toward the hiring of older students. The Child Labor Laws may be a factor. Employers prefer to hire students seventeen years of age and older. This creates a problem in finding placement opportunities for Freshmen and Sophomores to gain occupational experience. Physical strength and endurance was considered a needed characteristic by a large number of firms. Students with a farm background were preferred over those with an urban residential background. When required to sell, students with a knowledge of plant materials are preferred. A large majority of employers desire part-time students, help. The competencies most needed by student employees were: identification of plants and care of tools, whereas the operation of power cultivators and propagation of plants were considered least important in the preparation of a student for further training with horticultural firms. Most of the comments included good personality traits, such as courtesy, willingness to learn, and interest as the most important qualities expected in student employees.

Much to my surprise, the study revealed that less emphasis and time should be devoted to plant propagation skills than has been my custom. This opinion, along with other conclusions gained through contact with employers in the fields of ornamental horticulture, will influence me in adjusting my courses in landscape gardening. As a result, knowledge and skills essential for gainful employment will be emphasized in my course of study for the training of landscape gardeners.

Experience Program Better Than Supervised Farming Program

FRANK C. PEARCE, University of California, Davis

Many supervised farming programs, as they exist, are inadequate to meet the needs of young people in agricultural programs today. Society is in a state of continual change, yet many programs are basically no different than they were twenty years ago. Too many have failed to take into account the implications of changes, such as: the decreasing opportunity to begin and advance in the vocation of farming; the proportion of land used for purposes other than farming; the increased complexity of acquiring sufficient land, capital and equipment, which has sharply curtailed the project aspect of "growing into farming"; the number of students enrolling in agricultural programs is increasing, but many of these individuals are not from farms, while others are not interested in farming as a vocation; changing technology and advancing automation, which has altered the make-up of the demand on the labor force; recent legislation providing a broader perspective for the improvement of programs.

The importance of agricultural training is not decreased by these changes, on the contrary, they indicate that agricultural training is more necessary than ever before. However, the problem here is not the importance of agriculture, but the need for changing the emphasis from production to encompass the broader implications of the term agriculture. *It seems evident that revisions are needed in the present concept of supervised farming programs.* The problem is what changes should be considered for today's programs to meet the needs of modern day youth?

1. *Elimination of the phrase supervised farming program* from today's agricultural programs. This change is in order since our vision should encompass the total field of agriculture, not only farming, which is the common connotation of the current phrase. The term *experience program* is suggested as one which includes the broad spectrum of programs that are designed to provide experiences that are consistent with the needs of the individual.

2. *Experience programs must be designed to meet the needs of the students in the agricultural program* who: may enter some phase of production agriculture; may enter an occupation dependent upon agricultural training; seek advanced training in agriculture; seek an occupation not directly related to agriculture. The advancing program must be designed so that all interested youth may profit in accordance with their individual goals and abilities.

3. *The outcomes of an experience program should be greater than the sum of the parts which comprise that program.* A project does not equal an experience program, nor does holding a job or working on a land laboratory equal an experience program. Although these are parts of the experience program, the complete program should include an opportunity to: learn work habits and attitudes; serve as a source of motivation; learn about the total agricultural production operation; learn how to work effectively with others; become familiar with the scope of the opportunities in agriculture.

4. *The effective experience program should have a wider application than the local community.* Communication and transportation technology, plus the mobility of today's society, demand that the learning inherent in the program have application beyond the community to broad geographic areas.

5. *An experience program is not derived from the curriculum, but rather supplements the curriculum.* In too many cases the experience program is simply an extension of classroom presentations, this in turn tends to perpetuate experience programs which are inflexible and narrow in scope, a basis which is inadequate for the effective experience program. The experience program should add to and expand upon the learning experiences provided in the curriculum.

6. *The keeping of records* per se *is not an integral part of the experience program.* Record keeping should be a meaningful educational experience that will contribute to the present and future needs of the student. Records kept simply for the sake of meeting an arbitrary requirement are time consuming and too often of little educational value. For many of our students we have emphasized the procedure and neglected the purpose. Record keeping should serve as a means to an end, rather than an end in itself.

7. *Planned supervision must be an integral part of the experience program.* It is imperative that the experience program not be a haphazard affair. It must be organized with a clearly definable purpose and provide for continuity. It must also be such that the teacher and the employer will work together cooperatively, in order to determine and meet the needs of both the student and the employer. This means that supervision must be provided in order to direct, structure and insure the meaningfulness to the student of the experience.

8. *There should be no limits on the nature of the agricultural experience programs offered to students.* The range of experiences should vary from production projects to job placement, to occupational exploration, to the individual, who with the proper supervision, may create his own experience program. The kind of experience is important, but what is even more important, is that the experience program be an integral part of the student's educational program.

A Work Experience Program Meets Two Needs

PAUL PATRICK, Vo Ag Teacher, McMinnville, Oregon

The work experience program started from two growing needs. One need was to put a strong school farm program on a completely educational basis. The other was to take care of a number of boys that had very little opportunity to gain skills or experience in farm work or related occupations.

A meeting of the curriculum director, the vocational instructors, and the principal was held to see how we could better correlate our program to the needs of the students. Also discussed were ways in which to improve our vocational program through the utilization of additional funds as a result of new vocational education legislation.

In a graduate course taught by Henry TenPas, Oregon State University teacher trainer, on curriculum development, I wrote a paper on a work experience program for McMinnville High School. The proposed program was presented at a meeting where the principal, the school curriculum director, and the city superintendent were present. The proposal was accepted, rewritten, and submitted to the state office.

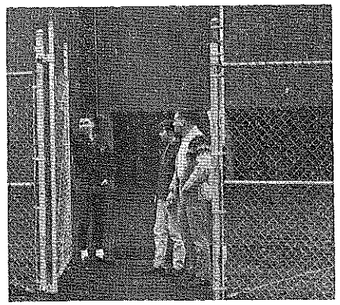
New Proposal

Some main ideas of the proposal were to place the more experienced, older boys on jobs, boys with a little experience work on the school farm, and a third group work together in a program that would give them work experience and skills in a varied program with close supervision and instruction. A teacher's aid would be hired to help with the program.

Two of the older boys were placed on jobs for the summer; one boy was chosen to work on the school farm and the rest of the boys worked on jobs created jointly by the F.F.A. and the school district.

The school farm work was included as a part of the work experience program. This work included mowing, raking, baling, custom work, mowing city lots and establishing acres of permanent pasture. One boy was considered the main farmer, and extra boys were used as they were needed. On those days where more than one man was needed on the school farm, one of the younger boys was given the opportunity, under supervision, until he demonstrated that he could proceed for the day.

The jobs we chose to be done by the remaining boys were many and varied. We obtained a contract to build two very large machine trailers. Since the school had just completed a football stadium and football field we asked for the job of making and leveling two large parking lots, landscaping, and also building 2,800 feet of cyclone fence around the entire area.



Standing by one of the gates they helped to construct are, left, John Williams, Mike McMurtry, and Jeff Juenemann.

Jeff Juenemann, right, giving Mike McMurtry instructions on the operation of the grain combine.

We met each morning at the school shop to plan the day's work. If the boy who was working on the school farm had no problems, he proceeded to work. The teacher's aid gave the other boys any needed instructions before going to work for the day. He then worked with and supervised them for the rest of the day.

If any piece of farm equipment needed to be repaired or overhauled during the day, the machinery was brought to the school shop and all the boys helped repair it. Because of this program, the shop was open some of each week and other students, not in the work experience program, could come in to repair some of their home equipment. Several farm boys in our agriculture program utilized this opportunity.

The two boys that worked for farmers were paid by them. The boys who worked on the school farm were paid by the F.F.A. When they worked for the school, the district paid them. Thus, besides the invaluable experience these boys received, they also earned wages for the work accomplished.

Evaluation

When the program was finished this fall, we evaluated it in several ways. How many boys did we use in the program, what did they learn, and what was accomplished? Three boys became competent in operating farm machinery on the school farm; six boys worked in our shop, landscaping, and the fence project.

The skills practiced and learned included welding, construction in metal and wood, transit work, land leveling, repairing farm machinery, and fence building which included lining up, bulldozing fence rows, pouring concrete, and putting up the fence.

The work accomplished included two large four wheel trailers, one of which won first place at both county and state fairs, 2,800 feet of cyclone fence constructed; two large parking lots leveled, one building completely razed; one combine overhauled; and a field-chopper, mower, and tractor repaired.

Teaching Farm And Non-Farm Boys In Same Class

R. W. CANADA, Teacher Education, Colorado State University

R. W. Canada

How may a vocational agriculture teacher in a one teacher department enroll and teach both farm and non-farm students with agricultural interests and aptitudes and carry them in the same classes through their junior year? Such a plan shown presents a possible organizational and scheduling plan. Adaptations should be made to conform to state plan requirements or be given prior review to see if such classes might be organized and conducted as a "pilot" program.

The emerging program of non-farm agricultural occupations brings a new challenge and opportunity to vocational agriculture teachers for service to all students with agricultural interests and aptitudes. Fitting programs into the daily teaching schedule presents a pressing problem to teachers of vocational agriculture in single teacher departments. A large majority of instructors in single teacher departments are already fully engaged teaching high school classes of vocational agriculture. Many are teaching, in addition, adult and young farmer classes.

A teacher of vocational agriculture who expects to add a class or classes in non-farm agricultural occupations might well first explore with his school administrators, the possibility of being relieved of teaching a part or all of any academic subjects for which he is now responsible. A second step involves an appraisal of student interests and aptitudes, possible training stations for work experience, and administrative interest and support for the program.

It is recognized that the agricultural occupations class in specialized training areas such as training nurserymen, tractor mechanics, machinery repairmen and the like may be taught by a competent local specialist who may be issued a special credential to teach such classes under the immediate

Suggested Four Year Curriculum Design Vocational Agriculture And Agricultural Occupations Classes

Vocational Agriculture I (Freshmen)

Minimum of 55 minutes daily for farm and non-farm students.

Teach — Agricultural Science, Farm Mechanics, FFA and provide for six months of supervised practice on—home farm, farm placement, School Land Laboratory or in *Agri-business.*

Vocational Agriculture II (Sophomores)

Minimum of 55 minutes daily for farm and non-farm students.

Teach — Agricultural Science, Farm Mechanics, FFA and provide for six months of supervised practice on—home farm, farm placement, School Land Laboratory or in Agri-business. During the second semester teach a six week unit on *Careers in Agricultural Occupations.*

Voc. Ag. III & IV (Juniors and Seniors combined in same class. Subject matter alternated yearly)

For the first year of operation of the program

Teach — Farm and Home Planning, Farm Management, Machinery Management, Livestock and Crop Management, Farm Mechanics and FFA for 30 weeks of the school year, two periods daily, to both juniors and seniors in a combined class. For the last six weeks of the second semester, teach the juniors and seniors in a combined class for two periods daily *Orientation to Agricultural Occupations,* followed by summer cooperative work experience for the juniors and possibly certain seniors.

The instruction in *Orientation to Agricultural Occupations* would provide the necessary background to enable students to secure summer employment on a cooperative work experience basis in Agricultural Occupations. Juniors would then be ready for the *Special Class for Agricultural Occupations* for the senior year.

For the second year and succeeding years of the operation of the program.

During the last six weeks of the second semester the Juniors and Seniors will *meet together daily for one period,* preferably the first period of the class on farm management, livestock and crop management, farm mechanics, farm machinery management, and FFA.

During the second period of the class the *Juniors* will be given instruction in *Orientation to Agricultural Occupations* followed with summer cooperative work experience in agri-business or on farms. During this same class period the seniors will be assigned to study hall or (shop under supervision) to work on individual or group management problems related to their supervised farming programs of farm mechanics.

Special Class in Agricultural Occupations

This class may be comprised of seniors and early post high school students. The class may be organized (1) on a *pre-employment* basis for *one* or *more* 55 minute periods daily depending on the vocational objectives of the students or (2) on a *cooperative work experience basis* providing for at least 250 clock hours of super-

Roy E. Huffman

Southern Region Plans for 1966 Conference

Shown here are the officers for the Southern Regional Conference for 1965-66. They are, left to right, J. N. Baker, Vice President, Georgia; Cayce Scarborough, President, North Carolina; John Holcomb, Secretary-Treasurer, Texas. These officers were elected at a business meeting in Atlanta and asked to develop plans for the Annual Regional Conference in the Spring of 1966.

(Continued from page 56)

advance by the individuals who organized the Seminar and others were suggested by the Seminar participants. The reactions were registered on a scale of 1 to 7 with 4 representing an average or neutral position. The composite judgment of the Seminar participants on some important questions related to the philosophy and objective of vocational education were as follows:

1. The Seminar participants said that vocational agriculture instructors should "lay it on the line" regarding the limited possibilities some indivduals have to become established in farming or ranching. (Score of 5.9)

2. The Seminar participants said that education in agriculture should place more emphasis on the broad economic and social relationships of agriculture to the rest of the economy and society. (Score of 5.9)

3. The Seminar participants gave fairly strong support to the idea that vocational agriculture students should be permitted to secure their work experience in agri-business situations. (Score of 5.2)

4. The Seminar participants voted strongly in favor of permitting students to continue in F.F.A. during their senior year if three years of vocational agriculture plus a senior year of distributive education became the general pattern. (Score of 6.0)

5. The Seminar participants gave strong support to advising non-farming high school youth into vocational agriculture if they show an interest in any phase of agricultural production and/or agri-business. (Score of 5.9)

6. The Seminar participants thought that considerable change or adjustment is yet due in the high school vocational agriculture program in order to bring it in line with the times. (Score of 5.2)

7. The Seminar participants thought it very important that programs be developed to train high school students for work with agriculturally related business. (Score of 6.3)

In the reactions to the above questions and other questions, a number of things were consistent. Although the group recorded itself strongly in favor of change, there was also an opposition to change which ranged from 5 to 10 percent of the participants on most of the questions. There was also a high correlation among the answers recorded by most individuals. That is, those persons who thought considerable change is needed, also thought it important that high school students be trained to work with agriculturally related business; that emphasis should be toward management rather than vocational skills and that the F.F.A. program should be modified.

This Seminar indicates great concern and a willingness to make the necessary modifications so that vocational agriculture can serve successfully in the future as it has in the past. Only a small minority are still on the defensive in the hope that the traditional program can be carried into the future.

R. W. Canada

(Continued from preceding page)

DAILY TEACHING SCHEDULE

Time	Mon.	Tues.	Wed.	Thurs.	Fri.	Sat. A.M.
9	Ag I Sci.	Ag I Shop	Ag I Sci.	Ag I Shop	Ag I Sci.	Supervision and Coordination
10	Ag III & IV Sci.	Ag III & IV Shop	Ag III & IV Sci.	AG III & IV Shop	Ag III & IV Sci.	
11	"	"	"	"	"	
12	LUNCH PERIOD					
1	Ag II Sci.	Ag II Shop	Ag II Sci.	Ag II Shop	Ag II Sci	
2	Ag Occ.	Ag. Occ.	Ag Occ.	Ag. Occ.	Ag Occ.	
3	Sup. & Coord.	Ag. Occ.	Sup. & Coord.	Ag. Occ.	Sup. & Coord.	

Teachers Should Be Full Members Of Leadership Team

LEO L. KNUTI, Teacher Education, Montana State University

Leo Knuti

This article suggests that *teachers of agriculture* be made full members of the leadership team for agricultural education along with State and District Supervisors and Teacher Educators. This leadership team is already in action. The emphasis here is to give it more stature. We have been doing this, but let's do a better job of total leadership.

Leadership is a crying need in shaping the present and future of agricultural education on a secondary school level. Let us strengthen our leadership power by elevating teachers of agriculture to a level of leadership on a par with State and National leadership as personified by university teacher trainers, State and District supervisors, and Program Specialists of the U.S. Office of Education. This is not an easy step, let alone one to be easily accomplished beyond the lip-service level. This concept of elevating the "local teacher leadership" wouldn't be just an academic question if it wasn't that leadership is so sorely needed at all levels. New programs in agricultural education need all the support they can get.

What about comparable situations? In industry, labor has a big voice in such items as salaries, production methods, employment qualifications and the like. Let no one assume that this is only a "gun-point" type of cooperation. In most cases, it is one of respect, mutual concern and benefit.

What about local school administration? Traditionally, this has been a military type, line-staff operation. Local school administration is still largely authoritarian, but the suggestions and practices point toward a team-type effort.

What about colleges and universities as to staff participation? Most universities have a University Senate—largely made up of elected staff members. Academic freedom is also more than a "battle cry."

What about making the agriculture teacher a full-fledged member of the team? He needs to be *invited* to become a member. He is already quite a grown boy.

He has a national organization founded in 1948 at the AVA Convention in Milwaukee. The NVATA has a full-time Executive Secretary. The national organization is staffed with Regional Vice Presidents. Each State has an Agricultural Teachers Association. Each level of organization has offices on a district basis with a program of work, implemented by meetings, projects, and newsletters.

Leadership is a corporate as well as an individual matter and responsibility. We have both individual and corporate leadership in our cooperating teachers.

Leadership from our agriculture teachers is a going concern. In many respects it has been just short of phenomenal. It has proven to be of a "*man's stature*." It is true, it has been invited to sit in on AVA meetings and at the U.S. Office of Education and at the National Center for Vocational Technical Education. These "sit-ins" are fine—let us implement them more as full-fledged membership.

Agricultural Education has been at the crossroads, so to speak. It is embarking on a wider horizon of training in agriculture and related occupations. Teachers can be a powerful force in making a success of the "New Image" for Agricultural Education.

There are distinguished leaders among the State Supervisors with names such as Hurt, Sutliff, Faulkner, Weiler, and McMahon. Teacher educator names of distinction include Hamlin, Scarborough, Sutherland, Phipps, Peterson, and Bender. Local teacher-leader names heard often are Johnson, Wall, Durkee, Howey, Page, Stenzel, Devin, and Widger. U. S. Office of Education leaders currently include Hunsicker, Gray, Nielsen, and Tenney. National Center leadership is headed by Taylor and Stevens. A number of "big" names escaped the above list.

The key role that teachers play is in putting the programs into action. If they help develop a program, they can say, "This is the way it will be done. Let's all get behind it."

Supervisors, teacher educators, and teachers, a "Leadership Troika" desperately needed in all areas of Agricultural Education at all levels.

Vo Ag Teacher Gets National Honor

Mr. W. A. Frey
Vo Ag Instructor
Crosby, Minn.

W. A. Frey

Dear Mr. Frey:

Congratulations!

Your exceptional work in behalf of responsible, patriotic citizenship and the American Way of Life has been singled out by the Freedoms Foundation's Distinguished Awards Jury as an important, professional contribution to maintaining our American Constitutional Republic.

It is my pleasure to inform you that you will receive the 1964 Valley Forge Teachers Medal. I send these greetings in behalf of the Trustees and Officers of Freedoms Foundation at Valley Forge.

Presentation of your medal and citation will be carried out in your home community. The awards are being sent to your superintendent.

There is no calling in America today more important or vital to our country's future than forthright teaching of the verities of our spiritually based Constitutional Republic, now under assault by world communism. By virtue of your selection, Freedoms Foundation is delighted to bestow this proper recognition on you for your outstanding service beyond the call of duty in helping our young people to a better understanding and knowledge of their rights and responsibilities in this land of God and Freedom.

Please accept my personal congratulations.

Yours faithfully,
KENNETH D. WELLS,
President Freedoms
Foundation at Valley
Forge

Editor's Note: Mr. Frey was also 1964 Minnesota Teacher of the Year. Our congratulations, too!

NVATA News and Views

Wenroy Smith
Special Representative

The New Occupational Mix

A tremendous theme, and a challenging all-inclusive topic, which certainly could stimulate all kinds of discussion and writing about the many and varied types of programs in vocational agriculture and the directions they might take. The opportunities for developing training programs and the large number of employment possibilities might well be beyond our comprehension. High school pupils and young men with a sincere interest in the broad field of agriculture should have no problem in finding a place to gratify their desires.

In like manner, teachers of vocational agriculture can be experiencing a NEW OCCUPATIONAL MIX. At no time since the inception of the vocational program in agriculture have there been so many opportunities for teachers to further gratify their desires by developing teaching programs of more specialized interest to them. It could well be said, at this point, that possibly the interest of the teacher would not always correspond with the program suited to the pupils of his community. This may be true, to an extent, however, as a rule the teacher will usually find himself in a situation where he has a fair number of interests to his liking, and if that is not the case, he will most likely find a situation better suited to him by changing locations.

There also are an increasing number of multiple teacher departments, area-technical schools, and other types of school organizations, which offer programs in which a teacher may do more specializing in the area of his greater capabilities. Opportunities of this type would be more prevalent in the more densely populated areas of the United States.

Another possibility for the further development of special interests is a type of "team teaching". With this plan a number of teachers within reasonable commuting distances may exchange their services with other teachers in the area on a regularly scheduled basis. It is recognized that there may be problems with this plan, however, generally they are not insurmountable and the program is not operated on a full school term basis. It does have the advantage of making available to the pupils, for a limited time, a training program which the local teacher might not be able to offer from his own capabilities.

Many fine articles have been written, and many more will appear in this and other professional publications, on program development for varying situations. There can be no question that the teacher who is willing to read widely and to participate in the many fine professional improvement offerings of the state universities, the summer conferences, and the in-service classes, can well find a suitable place, among the evolving new breed of agriculture teachers.

Reorganization of the FFA

Now that the time for another national FFA Convention is rapidly approaching, it is quite important that local advisers are familiar with and give due consideration to the changes being considered for the FFA. It is very likely that by this time much information has been distributed concerning the proposed changes. State vocational agriculture teachers associations have been informed of proposals made by the National FFA Study Committee and possibly these have been discussed at state and regional meetings.

With the local adviser being at the grass roots of the FFA, he should have a number of excellent ideas for proposed changes. In consideration of the fact that he will be expected to implement the changes in his local chapter, he should definitely have a voice in adjustments being made. He can well do this, if he has a delegate, by helping the delegate understand the situation and by informing him of the business to be conducted at the national meeting.

Even though it is too late for specific suggestions to be considered at this year's convention, local advisers should be aware that the NVATA has an FFA Relations chairman who annually requests suggestions from the state association as a part of the NVATA Program of Work. Any member may make his wishes known by submitting them to his state association, and upon their acceptance, they are then reported to the national association, the NVATA. This is a regularly established channel through which members may make their requests known to the National FFA staff.

James Wall
Executive Secretary

It is appropriate also to say it is the belief of many NVATA members that local advisers should have representation on the National FFA Board of Directors. It is hoped that this belief will soon become a reality.

The National NVATA Convention

The national NVATA Convention, in conjunction with the AVA annual Convention, will be held in Miami Beach, Florida, December 4 to 11. NVATA sessions will convene on Saturday, December 4, and will continue into the following week with Agriculture Division and AVA meetings scheduled in a convenient manner.

National and state officers and delegates will meet in early business sessions with professional improvements meetings to follow during the remainder of the week. Detailed information has been made available in the AVA Journals beginning with the May issue.

Teachers who have attended place great value in participating in these meetings. Those who have not attended are encouraged to plan to take part in possibly one of the most significant conventions in many years. New programs and new developments will be the highlights for this year and great professional assistance and inspiration may be obtained from this worthwhile experience.

Teach Electrical Wiring To Adults

John D. Todd

JOHN D. TODD
Teacher of Vocational Agriculture, Eagleville, Tenn.

We are living in an extremely technical age. Adult farmers today must know the science of crop and livestock production; the principles and applications of good farm management; and procedures for planning, devising, and actually constructing farm buildings and equipment.

We, as agricultural educators, often neglect the latter phase of this needed instruction. Adult farmers have available sources of information about production and management, but there are few opportunities for learning about the technical phases of mechanics. Classes in these areas often stimulate more enthusiasm and interest than classes in the production and management phases of agriculture. After teaching three adult courses in arc welding and one in electrical wiring, I find that this type of instruction is in great demand by adults.

I have just completed teaching fifteen adults a course in electrical wiring. The adults who were enrolled varied from large farm operators, who had no income from any source other than farming, to small part-time farmers. Each adult who attended wanted to learn practical electrical wiring in order to maintain, construct, and plan electrical projects for their home and farm. Some of them will probably use their acquired knowledge in wiring for their neighbors during slack seasons of farm work. Most of the adults who attended had problems of an electrical nature on their farms and were actually following up their instruction with wiring practices before the course was completed.

The course consisted of twelve hours. The course included the following areas of instruction.

1. Principles of electricity
2. Principles of wiring
3. Wiring simple circuits
4. Planning for house wiring
5. Wiring electrical home circuits
6. Trouble shooting circuits
7. Electrical problems
8. Low-voltage remote control wiring

Although some principles were taught, the instruction was carried beyond this level. Several demonstrations were given in teaching principles and also in actual practice. Each class member was given the opportunity to wire circuits and assimilated panels representing the actual situation. Each member studied the code requirements for wiring in his locality and often brought his problems to class for solutions.

Modern Trends Were Included

The instruction was kept up to date and even projected into the future. The practice of wiring for the future rather than for the past was emphasized in all of the instruction. This was brought about by using the latest in "code" requirements and implications and making use of the most qualified resource personnel available.

To really project into future wiring, two class sessions were used in studying low-voltage and remote control wiring. With the coming of more labor saving machines around the farm and in the homes, this could truly be wiring for the future. There would be no simpler method of control and operation of such equipment than the use of low-voltage.

Because of this the class was given an insight into the problems involved and methods employed in wiring by low-voltage. They actually wired a demonstration panel using most of the low-voltage equipment available at this time. Low-voltage and conventional wiring were both compared in relation

Most of the classroom and wiring instruction was given by the vocational agriculture instructor. Electricians and other specialists were consulted on problems which arose or were anticipated. The local power distributor supplied an electrical advisor for a class on "trouble shooting circuits," and the Deputy Electrical Inspector conducted one class on "electrical problems." The course was conducted in a student teaching training center cooperating with the University of Tennessee, and two student teachers helped with the construction of demonstration panels and teaching.

In the shop during wiring demonstrations, members who had acquired the greatest understanding helped the ones who lacked it. Even though this resulted, the intent was to let each member get as much wiring practice as he desired.

Cost

The total cost of the class was equally divided with each member and was indeed kept to a minimum. The cost came to $2.25 per person. This was primarily for consumable materials, since most of the equipment used belonged to the vocational agriculture department. This low cost was also made possible because the power distributor and local electrical supply establishments loaned different types of demonstrations and installations used in conducting the course.

At the expense of the local vocational agriculture department, each member was given a certificate of proficiency upon completion of the prescribed instruction in electricity. This certificate was signed by both instructor and principal of the school.

Summary

Technical training in areas such as electricity is a need and desire of our adult farmers today. The instruction should be kept practical and on the doing level. It should consist of problems for the future. Most of this instruction can be furnished with personnel and equipment which are available in the community. The cost can be kept to a minimum and still give quality

New Programs in Agricultural Labor Relations

JAMES W. BECKET, Specialist, Agricultural Education, University of California, Davis

"I appreciated this course very much. I drove 80 miles round-trip each time—never missed."

How many times have you had this kind of response to an adult night school program? Maybe it sounds so implausible that you even doubt the truth of the statement. It is, however, an actual quote from R. F. Mrosko, a citrus grower from Terra Bella, California. Mr. Mrosko had just completed a ten-session course in Farm Labor Supervision conducted by Bruce Jensen, Head of the Agriculture Department of the College of the Sequoias, Visalia, California.

The class was one of nine experimental programs taught during November and December, 1964, in areas of intense labor use in California. While the distance traveled by Mr. Mrosko may be atypical, his expression of gratitude is not.

This course in the supervision of farm labor has had several things "going for it" to produce the apparent success. One of the most important was the inception itself, for it sprung from the expressed need of the agricultural industry. So much interest was created by the original program at Blythe, California, that it was obvious development on a larger scale was essential. This original program was developed and taught by an elementary school administrator, working closely with two men from the California State Department of Employment Farm Labor Office, who actually originated the idea. Financing and support were obtained from the Blythe Growers Association. This cooperation between grower associations, the Department of Employment, and educators has been retained as the program has developed statewide. In fact, the framework for statewide development was formulated in a meeting of officials of the Farm Labor Committee of the California Council of Growers, the State Department of Employment, and the Bureau of Agricultural Education. Two important steps were taken as a result of this meeting. S. S. Sutherland, Chairman of the Department of Agricultural Education, University of California, Davis, accepted the responsibility of developing a manual for use by instructors, and the California Council of Growers contributed the funds to bring a group of instructors to Davis for a workshop in the use of the manual.

Sutherland conducted the workshop in August, 1964, with eighteen instructors attending, most of whom were either high school or junior college agriculture teachers. Since that time, nine courses have been conducted, with several more planned for 1965.

Another unique operative feature of this program has been the recruitment pattern for the classes. In almost every case, class members have been signed up either by a joint effort of the local farm labor office and the local grower association, or one or the other alone. The instructor has not had to worry about this area of responsibility. This has been a source of pleasure for the instructors concerned. As one instructor put it, "For once we are not going to the public trying to sell a program—the public is coming to us." It should be noted, however, that even though the classes are organized by outside agencies, enrollment is still done through, and the program taught under, the auspices of the adult or extended day program of the high school or junior college involved.

The material presented is really not new. In fact, one of the major sections is on how to teach a worker a job, and the method was developed and used extensively in the Training Within Industry program of World War II. The men are given an opportunity to teach a job in the classroom, and since the ability to break down a job is necessary for proper instruction, practice in this skill is also given. The other major area presented is that of personnel problems. This is treated by sections on how to get results through people and problem solving. The material is presented in ten two-hour sessions. Two patterns have been tried to date, with some of the programs running once a week for ten weeks and some twice a week for five.

The program is primarily intended for supervisors of farm labor, either as foremen or owner-operators. However, men in agricultural businesses have been in some of the classes too. One man, in charge of truck drivers for a concrete pipe company, said after taking the course, "I think anyone having employees under them should take this course." A foreman of 15 years' experience in the installation of concrete pipelines for farm irrigation systems, was also enrolled.

Even though all levels of management have been enrolled and benefits seem to accrue to all, one experience indicates that all from one organization should not be in the same class. In spite of efforts to the contrary, one class started with the majority of the members from one large farming operation, ranging from one of the owners to men in charge of stoop labor crews. Coupled with some other unfavorable conditions, this caused attendance to drop to the point where the course was canceled. If the class is mixed, in terms of levels of management, careful attention must be given the man in charge of field crews, as his confidence in his ability to put on a demonstration in front of the group will be shaky to begin with. As would seem natural, if the group includes the top boss, the obstacle may be insurmountable. On the other hand, if the instructor can help this man develop his ability and confidence to the point where he can give a successful demonstration before the class, there seems little doubt that he is going to do a better job of worker instruction than he did before.

Another experience indicates peak periods of labor need close consideration if the program is to be a success. A few weeks after one class was started, rain ended lettuce harvest in the area and part of the group moved to another area. The same rains hampered celery harvest to the point where some of the class members were still in the fields trying to get trucks

(Continued page 70)

Hoover and Weyant

(Continued from page 55)

3. The general attitude of the individual students toward their work improved as attested to by unsolicited comments from other teachers and administrators.
4. Vocational agriculture teachers remained very much in favor of continuing the pilot study.
5. Local school administrators maintained favorable attitudes toward the pilot study.
6. Interest in the project by possible employers improved and they were willing to provide training stations for more boys.
7. Parents need more information about the program. This is a problem area that is being corrected.

The work of the first two years demonstrated that a qualified coordinator could work with several teachers of agriculture and achieve the desired results.

The Third Year

During the third year of the pilot study, the major objective was to see if teachers of agriculture could teach agri-business and supervise work experience as a part of their regular work. Interested teachers in 22 additional schools were selected from various types of farming areas throughout Pennsylvania to team up with the 3 schools already involved. The project coordinator worked with teachers in these 25 schools and provided them with instructional materials, including student booklets for five units of study and a teacher's plan for each of the five units. The suggested time allotment for these five units was 20 class periods per unit or a total of 100 class periods. Some teachers believe that this is not sufficient time to adequately teach agri-business. Adjustments in annual plans and more experience in this area of work are needed.

Units and Problem Areas

Unit I. Exploring Careers in Agriculture
Problem Area 1. The Agriculture Industry and You
Problem Area 2. The Agriculture World of Work
Problem Area 3. Opportunities in Agricultural Occupations
Problem Area 4. How Vocational Agriculture Helps You Choose a Career

Unit II. Preparing for Employment
Problem Area 1. Sources of Information
Problem Area 2. Job Procurement Procedure
Problem Area 3. Language Skills
Problem Area 4. Arithmetic Skills

Unit III. Human Relations
Problem Area 1. Developing a Winning Personality
Problem Area 2. Relations with Fellow Workers
Problem Area 3. Human Relations in Business
Problem Area 4. Maintaining Good Relations with Employers, Co-Workers and Customers

Unit IV. How Businesses Are Organized
Problem Area 1. The American Enterprise System
Problem Area 2. Ownership and Control
Problem Area 3. Establishing a Business
Problem Area 4. Capitalization
Problem Area 5. Government Regulations

Unit V. How Businesses Are Operated
Problem Area 1. Duties of Employees in Primary Marketing Functions
Problem Area 2. Duties of Employees in Secondary Marketing Functions.

Work Experience

Teachers are encouraged to plan and supervise work experience programs so that each student will gain a "real" experience. For example, teachers at the Garden Spot High School, New Holland, worked out schedules for 12 students who were placed with businesses. One of these schedules was as follows:

I. Proposed Work Experience Schedule for a Feed and Farm Supply Cooperative

A. Getting Acquainted with Business
1. Recognize how service fits into organization
2. What is sold
3. Who is served
4. Location of areas
5. Size of operation (manpower and dollars)

B. Warehouse Operation
1. Incoming shipments
2. Customer service

C. Behind the Counter
1. Sales techniques (displays)
2. Records(inventory)
3. Ordering

D. Deliveries
1. Truck maintenance and equipment service
2. Deliveries themselves

E. Field Service Man
1. Member and public relations
2. Demonstrations
3. Sales and complaints
4. Farm management guidance

Evaluation

The pilot project has given a number of teachers experience in teaching the subject matter of agri-business, it has provided a working knowledge about supervised work experience, and a body of subject matter has been developed for both students and teachers. Equally important, the pilot project has given teachers confidence in the idea that they can teach agri-business and supervise the work experience of several boys. Teachers in single-teacher departments *can* initiate a program for and make a contribution to "education

Wilson and Witten

(Continued from page 54)

Course Content for a Two-Year Agricultural Distribution Program

I. Course Content in Agriculture	*Estimated Hours*
Classroom:	
1. Drawing and Plan Reading	30
2. Metals (Part I)	15
3. Principles of Welding	5
4. Electrical Units	20
5. Fertilizers and Nutrients	10
6. Controlling Weeds	10
Total	90
Laboratory:	
1. Organization, Safety, Project Evaluation and Teacher Demonstrations	10
2. Woodwork	20
3. Welding and Cutting	30
4. Cold and Hot Metal	15
5. Electricity	15
Total	90
Total Hours in Agriculture	180

II. Course Content in Distribution

Area: Personal Development	
Unit: Orientation	20
Human Relations in Business	15
Leadership Development	5
Area: Selling	
Unit: Organization for Selling	5
Selling Today	15
Mathematics of Distribution	15
Area: Merchandise Information	
Unit: Merchandise Information I	15
Standards, Grades and Labels	
Total Hours	90
Area: Sales Promotion	
Unit: Advertising as an Aid to Selling	15
Area: Management	
Unit: Stockkeeping (10 hours)	10
Unit: Store Operation (20 hours)	20
Area: Marketing	
Unit: Distribution in a Free Economy	20
Unit: Careers and Channels of Distribution	10
Speech (15 hours plus integration with other units)	15
Total Hours	90
Total Hours in Distribution	180
Total Hours in Agriculture and Distribution	360

New Program Is Successful

The teacher of vocational agriculture and the distributive education coordinator began teaching the first year of the course in September, 1964. Each teacher instructs the class for 90 hours per academic year. Fifteen students are enrolled and, in general, the content as listed in the course outline is being followed.

Interest on the part of the fifteen class members has been extremely high, and thirteen of the students have pre-registered for the second-year course. One of the class members is a graduating senior who was allowed to take the course by special permission, and one member chose not to re-enroll for the second year.

The course has been highly successful to date, and it is believed that this trend will continue. It was anticipated when the course was initiated that one of the results would be to qualify young people for employment locally who otherwise would seek work elsewhere. It is now believed that this is being accomplished and that the entire community will thereby benefit.

Dear Editor:

As you have noticed in many localities fence signs are hung in about every place conceivable.

I'll pass this picture on for what it's worth for I feel one of my FFA boys and his Dad have a dandy idea for organizing and displaying their fence signs.

They took some 2 x 4's, nailed a piece of hardware cloth on the fence, a couple of coats of paint and they have a well organized place to display their signs.

Sincerely,

G. I. Irvine
Vo Ag Instructor
Tonica, Illinois

It is to be hoped that administrators of the Vocational Education Act of 1963 will follow the idea expressed by IRS Commissioner Sheldon Cohen when he said, "I have a special responsibility to see our tax laws administered honestly and fairly. . . . Strained interpretations of the law must be avoided." In my opinion, some of the interpretations of the Smith-Hughes Act down through the years could be called "strained". — *Editor*

James W. Becket

(Continued from page 67)

out of the mud while the class was going on. So, in spite of the fact that a few were still attending, this class had to be postponed to a later date, pointing to the importance of gearing the timing of an adult program to the farming operation of the industry in the area.

As indicated, all of the questions are not answered. To aid in this task, Vocational Education funds have made it possible to coordinate the program on a statewide basis by a staff member added to the Department of Agricultural Education, University of California, Davis. The author has spent full time since November 1, 1964, in coordinating, developing and evaluating this program.

In summary, the following items seem to contribute to the success of a program in the supervision of farm labor:

1. Need for the training should be felt and expressed by the agricultural industry.
2. Cooperation should exist between state employment personnel, farmer organizations, and educators, both at the state and the local level. One of the major activities of the agencies outside of the school should be the recruitment of class members.
3. Specific materials should be developed for the courses, and instructors should be trained in the use of these materials.
4. Instructors should be familiar with the farming operations and the farm labor situation within the area.
5. Class sessions must be timed to fit the farming operations in the area. In areas where supplemental labor is used extensively this may be extremely difficult. For example, enough activity must be going on to have crew foremen in the area, yet have time to attend class regularly. Planning the class for five weeks instead of ten may help solve this problem.
6. All levels of management from one organization should not be present in one class. Several levels in one class will work if the individuals are from different organizations.
7. Top management must believe in the worth of the program and convey this feeling to their men enrolled. Some employers have paid their men to attend.
8. Faster development of the program can take place if someone can see programs in operation and pass on ideas and suggestions.

Robert Jibben

(Continued from page 56)

Working with the different organizations in the community can be the fastest way to become acquainted with the area. This is especially true for teachers who move, or for new teachers entering the profession. Learn the best yielding crops, pasture carrying capacities, marketing channels, commercial or custom rates for work, soil problems in certain areas, and the like. Some of the leading farmers or ranchers can be valuable aids in helping the teacher set up a program for instruction. Much time and effort for the teacher can be saved if he seeks help rather than research these things out alone or learn them from experience.

Sitting down with the other agriculture leaders in the communities in which we live, whether it is a commercial or a non-profit organization, can be rewarding and enlightening. Their views may often be much different from ours and it is our job to carefully evaluate them before rejecting or accepting them. If we are going to steer the young people that we work with into agricultural jobs, we must know the demands of business and the qualifications of people for whom they are looking. That is, what qualifications are needed to compete in agri-business fields as well as in farming? Knowing the requirements that a bank agricultural representative looks for in a farmer before making a loan, how much service he can offer the farmer in management, or being able to tell the student training needed to qualify for such jobs could all be of interest for the students in your class.

If in the past you have failed to use these local community resources in your instruction program, you are urged to try them. I'm sure the results will be rewarding and can have a lasting effect on your students. These people are generally eager to tell about their work if they can find a willing listener.

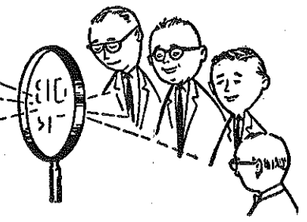
From U. S. Office of Education

H. N. Hunsicker conferred with L. R. Shield, National President, and Ben J. Chlevin, Executive Director, of the Golf Course Superintendents Association of America, with regards to types of agricultural training programs needed by their present and potential employees. He stated there are more than 8,000 golf courses in the USA embracing nearly 300,000 acres of land, and that approximately 400 new courses are being established annually. The procurement of well trained personnel, and keeping them abreast with changing practices, is one of their most crucial problems. The association proposes to work with vocational educators in Maryland in establishing the first pilot center training program in golf course operation and management.

E. J. Johnson, in cooperation with A. H. Hollenberg of the Facilities Branch, has developed guide outlines for training programs for "aides" in the areas of ornamental horticulture, agricultural construction and maintenance, arboriculture, conservation, rural sanitation, and water supply. It is expected that these outlines will result in the development of curriculum material for use by teachers of vocational agriculture.

H. N. Hunsicker and Walter Brooking worked with officials of the Agricultural and Technical Colleges in Morrisville and Cobleskill, New York, in developing proposals for preparing curriculum guides for technician training in agriculture. The staff at Morrisville will prepare a guide on "Food Processing Technology" and the Cobleskill staff will prepare one on "Agricultural Production Equipment Technology".

BOOK REVIEWS



RAYMOND M. CLARK
Michigan State University

COOPERATIVE OCCUPATIONAL EDUCATION AND WORK EXPERIENCE IN THE CURRICULUM. Ralph E. Mason, and Peter G. Haines. The Interstate Printers and Publishers, Danville, Ill. 1965, pp. 474, Price $6.75 less educational discount.

The book is designed to apply to the cooperative occupational education programs in business, distributive, industrial, agriculture and home economics. It compares the vocational objectives of cooperative training with the general education objectives of work experience programs. The rapidly changing economic, social and technical changes of the society are accompanied by equally great changes in the world of work. These changes call for new ideas and programs of education and occupational experience.

Mason and Haines have provided material in this book which will be valuable to teacher educators, coordinators, supervisors, school administrators and others as they plan and implement programs under the Vocational Act of 1963.

The text is organized in four parts comprising 15 chapters as follows:

I. *Emerging Needs in the World of Work*
   1. Education for Employment in a Changing World of Work
   2. A Brief View of the Development of Vocational Education

II. *Curriculum Patterns Involving the Work Environment*
   3. Using the Work Environment to Produce Desired Educational Outcomes
   4. Work Experience Programs for General and Higher Education
   5. Cooperative Occupational Education Programs in the High School

III. *Planning Organizing, and Operating the Cooperative Occupational Education Program*
   6. The Teacher-Coordinator and His Job
   7. Planning and Organizing a Cooperative Education Program
   8. Coordination Practices in a New Program
   9. The Teacher-Coordinator's activities in the On-going Program
   10. Providing for Effective Related Instruction in Schools
   11. Youth Organizations in the Cooperative Programs
   12. The Coordinator and Adult Vocational Education

IV. *Meeting Needs in Specialized Occupational Fields*
   13. The Distributive Education Program
   14. The Cooperative Office Education Program
   15. Cooperative Education for Industrial and Technical Occupations

Appendix

Ralph E. Mason is Professor and Chairman, Division of Business and Distributive Education, Indiana State University and Peter Haines is Professor and Chairman, Business and Distributive Teacher Education, Michigan State University.

Raymond M. Clark
Michigan State University

THE COURAGE TO CHANGE by Robert C. Suter. Published by The Interstate Printers and Publishers, Inc., Danville, Illinois. 294 p., illustrated; 1965. Price $5.75.

This new book presents in forthright language an analysis of the technological changes that have occurred in storing forages and medium-moisture feeds and the impact that this technology—oxygen-free sealed storage—has had on the harvesting of forage crops and on the feeding of livestock.

The book is organized into eight chapters. Topics discussed include changes in technology and management, problems in harvesting and storage of forage crops, the Harvestore system of farming, economics of oxygen-free storage, economics of forage crop production, medium-moisture feed relationships, economics of livestock production and characteristics of Harvestore farms. It is well illustrated with photographs and tables.

The Courage to Change is an appropriate title for this book as it takes courage to change from established ways of doing things to new ways, and it takes courage to make the major investment required for many of the new kinds of structures and equipment which modern farming demands. The book may be considered as a valuable reference to the teacher and for advanced students in vocational agriculture.

Dr. Suter is an agricultural economist at Purdue University and is also Economic Consultant to the A. O. Smith Harvestore Products Corporation.

Denver B. Hutson
University of Arkansas

Trying Days

Squirrels in the timber stand
Rustling their loot,
Rabbits all around the place
Daring you to shoot.

Restless students all around
Wand'ring to and fro,
Classrooms on each side the hall
Filled to overflow.

Teachers trying to do right
Drifters in and out,
Classes scarcely underway
Teachers most worn out.

Just remember last year, too
Had its trying days,
Then your efforts turned the tide
In a dozen ways.

Doc. Paulus (Retired)
University of Tennessee

ECONOMICS FOR MODERN AGRICULTURE, W. L. Dorries and J. Roland Hamilton, Exposition Press, 386 Park Avenue, South, New York. 1965. pp 227, Price $5.

"Economics for Modern Agriculture" was written with four objectives: (1) to provide a book that would embrace all phases of economics studied by high school students of agriculture, (2) to give beginning college students in agriculture a survey of the broad field of economics, (3) to help leaders in agriculture-related industries to understand the significance of current problems affecting the entire agricultural industry, and (4) to help students develop a scientific attitude toward the study of economic problems.

The book consists of 21 chapters, grouped in four sections as follows:

I Agriculture: Its Place in the Economic System
II Managing the Farm
III From Farm to Consumer: Buying and Selling Agricultural Commodities
IV Credit in Agriculture

The authors have made application of economic principles to problems of the agricultural industry. The application should help students to better understand, not only the principles, but also the application of economic principles to the solution of a problem. The book should be a valuable reference for advanced classes of vocational agriculture at the high school level and for students enrolled in young farmer-area vocational schools or community college programs at the post-high school level.

Dr. Dorries is associate professor of agricultural economics, East Texas State College, and Dr. Hamilton is professor, agricultural education, Mississippi State University.

Raymond M. Clark
Michigan State University

NEWS AND *VIEWS*

M. G. McCREIGHT
University of Nebraska

Byron J. McMahon, Chief of Agricultural Education, State Department of Education, Sacramento, California, retired June 30, 1965. He has served vocational agriculture for 45 years, as a teacher, supervisor, coordinator, teacher trainer, and chief. He is a member of many honorary organizations and vocational associations and holds many honorary awards.

Byron J. McMahon

James T. Horner

Irving Cross, Assistant Professor of Agricultural Education, returned to Colorado State University following one year's leave of absence for graduate study at Ohio State University.

Harold Anderson, is on leave from Colorado State University for graduate study at Ohio State University.

Dr. James T. Horner, was appointed chairman of the Department of Agricultural Education, University of Nebraska, July 1, 1965. He will be on leave of absence for nine months beginning September 1965 to participate in a new American Council on Education Program known as the Academic Administration Internship at Michigan State University.

Dr. H. W. Deems, retired as Chairman of the Agricultural Education Department, University of Nebraska, June 30, 1965. He had served as chairman since 1950.

Roland Peterson, consultant in the State Department of Education, Vocational Education Division, joined the Department of Agricultural Education, University of Nebraska in April 1965 as a research associate and instructor.

Edward C. Henderson, Vocational Agriculture instructor, Schuyler, Nebraska, joined the Department of Agricultural Education, University of Nebraska, in May 1965, as a research associate and instructor.

Thomas Lyons, joined the Department of Agricultural Education, University of Nebraska, in June 1965, as a research associate

Glenn Nicklas, teacher of Vocational Agriculture at the University School of Agriculture at Curtis, Nebraska, joined the Division of Vocational Education, Nebraska State Department of Education as a consultant.

Leo Herndon, becomes Teacher Educator at the University of Nevada in July 1965. He received his D.Ed. at Cornell University. Previously he was a teacher trainer in the Agricultural Education Department of the California Polytechnic Institute at San Luis Obispo.

Howard Christenson, is on leave 1965-66 as Teacher Educator from the University of Nevada to complete his Ph.D. degree at Ohio State University.

Neal D. Andrew will return in September, 1965, to the State Department of Education in New Hampshire to resume his duties as director of Agricultural Education following a leave for Ph.D. study in Agricultural Education at Ohio State University.

Martin Mitchell, teacher of Agriculture from Dover, New Hampshire, served as acting director for Agricultural Education during the leave of Mr. Andrew.

Dr. Hilding Gadda, Associate Professor of Agricultural Education at South Dakota State University at Brookings was promoted to professor effective July 1, 1965.

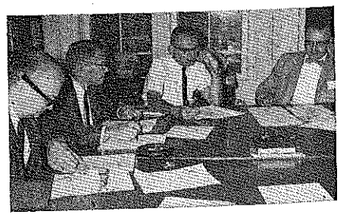
Denver B. Hutson, on July 1, succeeded Roy W. Roberts as Head Teacher Education at the University of Arkansas.

Dr. Hutson, a native of Arkansas, taught vocational agriculture in the state and was appointed to the agricultural education staff, University of Arkansas, in 1948. In 1955-1957 he served as Specialist in Agricultural Education and Advisor to National Institute of Agriculture, Republic of Panama.

Hutson received a Master's degree from the University of Arkansas and the Ed.D. degree from the University of Missouri. He has been quite active in professional organizations including Alpha Tau Alpha in which he served as a National officer.

Roy W. Roberts has been in public school work since 1916. He organized the Department of Vocational Teacher Education at the University of Arkansas in 1944 and has headed this department for the past 21 years. He earned the Master's degree from the University of Arkansas and was awarded the Ph.D. from Cornell University. He also attended the University of Toulouse, France; George Peabody College; and Louisiana State University.

The Department of Vocational Teacher Education at the University of Arkansas offers work leading to the Doctor of Education. Fields of specialization include Agricultural Education, Counselor Education, Distributive Education, Home Economics Education, Industrial Education, and Office Education.



During the Advisory Council Conference on Project DIMENSION, units and problem areas were identified in small group meetings. Virgil E. Christensen, George J. Shoop, Alvan F. Frank and Edward L. Litwhiler (from left to right) are shown working as a committee on

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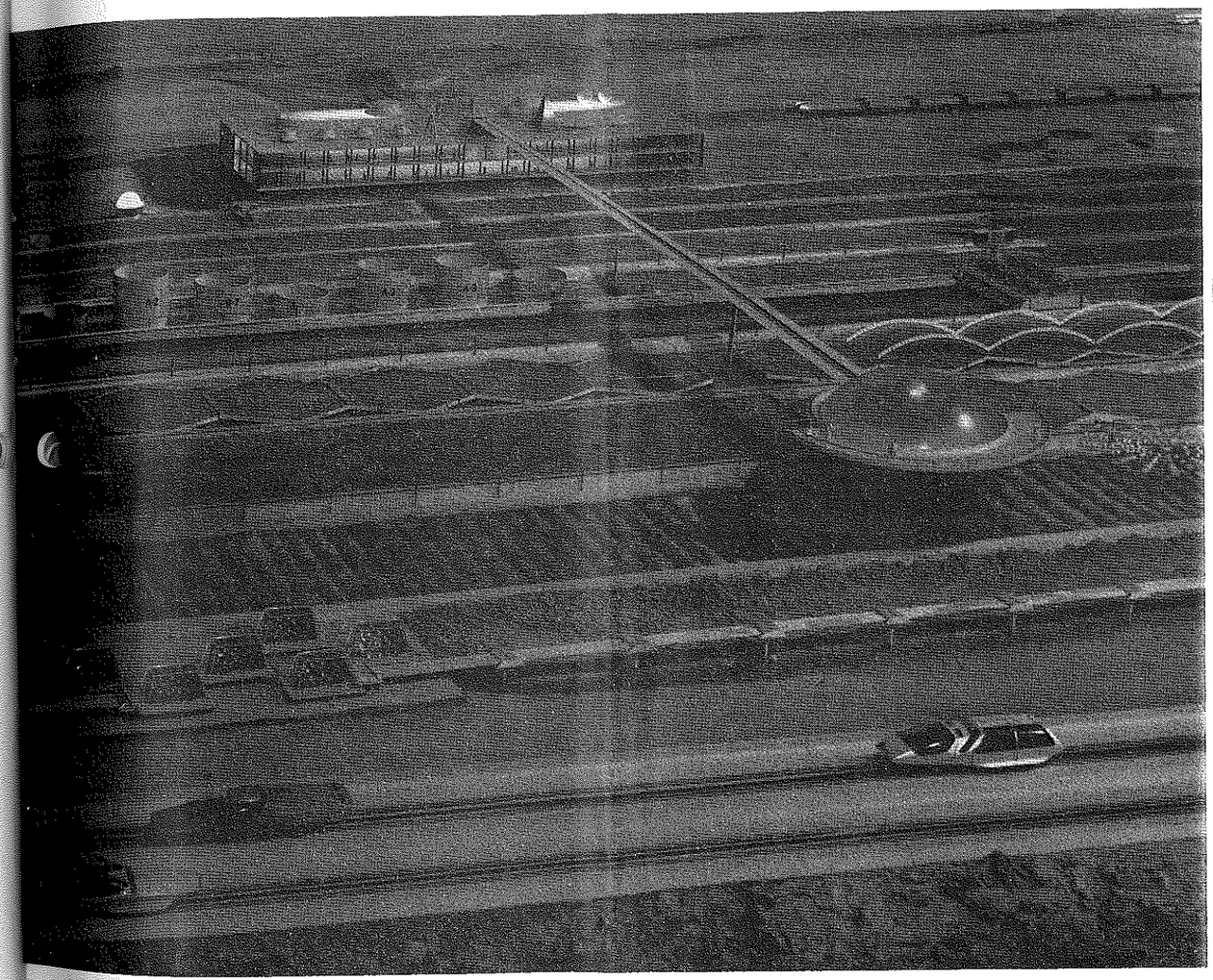

REMOTE CONTROL FARMING of the arid areas of the world was part of the "ride into tomorrow" of the General Motors Futurama exhibit at the New York World's Fair. Advance-design field machines straddle the rows of crops and perform each function from planting to packaging. Fertilizers are automatically added to desalted sea water which irrigates the fields. Varying climatic conditions can be created for segments of the fields to speed or inhibit maturation of the crops as market conditions demand.
(Photo Courtesy General Motors)

Featuring

Using Resources