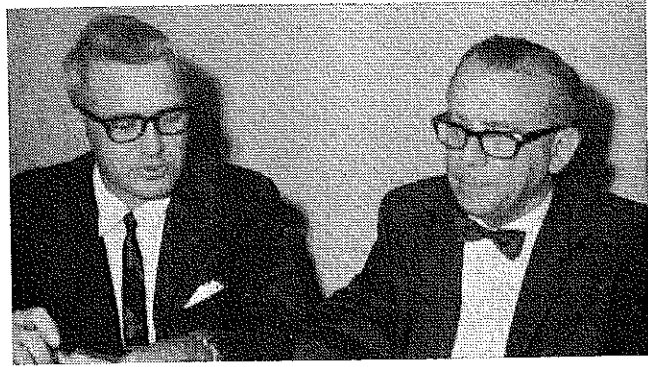
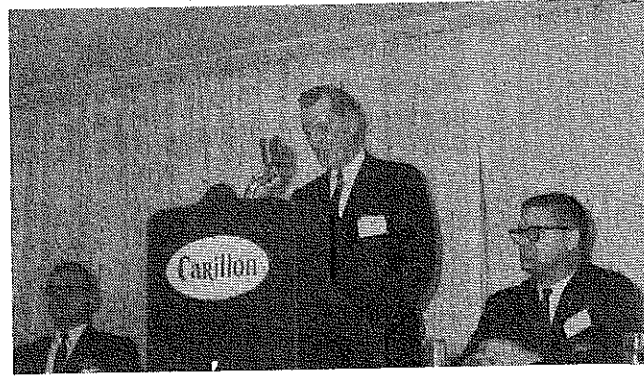


Stories in Pictures

Gilbert S. Guiler
Ohio State University



President Sam Stenzel left and Executive Secretary James Wall right make plans for NVATA opening session.



E. L. Sparrow, Training Department Manager, Tractor & Implement Division, Ford Motor Company, was keynote speaker at opening of the 1965 NVATA convention in Miami Beach, Florida.



Three vocational agricultural teachers each won a \$500 cash award from Chas. Pfizer & Co., Inc. of New York for outstanding contributions as this year's national FFA winners in poultry, dairy, and livestock farming. From left: A. J. Adolfs, Public Relations Director for Pfizer's Agricultural Division; Truman Tilleraas, Vocational Agriculture teacher at Blooming Prairie, Minnesota and winner in the livestock farming award, Bruce W. Emanuel, Greenwich, New York, teacher of vocational agriculture and winner of the Dairy Award, Rees C. Hackenbracht, vocational agriculture teacher, Bellevue, Ohio and winner of the poultry award, and Sam Stenzel, Russell, Kansas, outgoing President of the National Vocational Agricultural Teachers' Association, Inc.



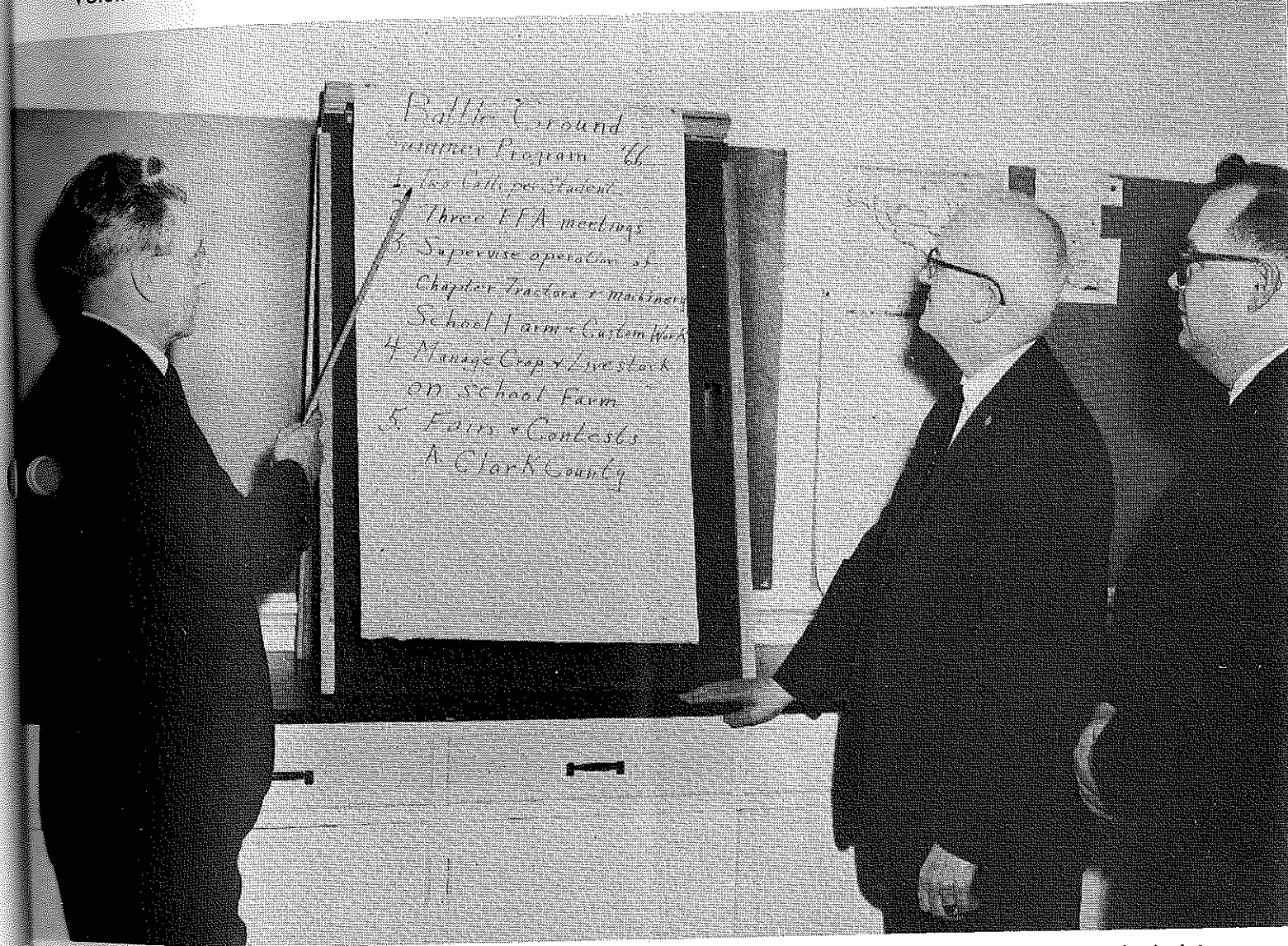
at the Miami Convention: Left to Right: James Wall, 1958; Luther Hardin, 1959; James Durkee, 1966; Floyd

AGRICULTURAL Education

Volume 38

May, 1966

Number 11



Ralph Olmstead, senior teacher of Vocational Agriculture at Battle Ground (Washington) High School since 1940, points out plans for the summer program to Superintendent of Schools, Harold Johnson, while Pat Alleyn, the second vocational agriculture teacher, looks on. photo—M. C. Knox, Washington

Featuring—

Planning Summer Programs

The professional journal of Agricultural Education. A monthly publication managed by an Editorial Board and published by Interstate Printers and Publishers, Danville, Illinois.

The Agricultural Education Magazine

Volume 38 May, 1966 Number 11

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Editorials

Summer Programs May Be The Key

The pioneers who saw the need for summer programs as part of local programs of vocational agriculture are due more credit than usually given. It may be that the summer program has been the major difference in vocational agriculture and other public school programs. Certainly the fact that the teacher of vocational agriculture was a year-round citizen of the community was a major factor in establishing vocational agriculture as a year-round program in the eyes of the local people.

It needs to be remembered that in the early days when the year-round programs were established, all other public school programs were generally limited to the September-May school year. In most places the principal of the high school was not on the payroll during the summer, therefore not in the community. In fact, frequently, the teacher of vocational agriculture was the only member of the school faculty in the community during the summer months.

Apparently, through the years, most teachers have made effective use of the summer months in further developing the local program of vocational agriculture. Supervisory visits to the homes of students, adults as well as boys, have been the major means of teaching during the summer months.

There is no substitute for a home visit, if the teacher wants to make his teaching relevant to the home situation.

If enrollment and programs have changed to the extent that the summer months are not now needed for an effective program of vocational agriculture, as some are suggesting, then the next step will be an academic year program. A logical result of such an event would be the end of vocational agriculture as an effective force in the local community.

The Regional Conferences

The Regional Conferences in Agricultural Education are dead.

This statement is not as disturbing to some as was the recent declaration that "God is dead". However, the demise of the old regional conferences did come as a shock to many of us. For more than 40 years, the Regional Conferences in Agricultural Education served as the major means of communication and professional improvement for the majority of supervisors and teacher educators. This was particularly important for the younger members of state staffs, many of whom are not on program at AVA or other national meetings, and rarely get to attend at all. So, it would seem that an effective program for professional improvement through the years would be kept in operation until a better approach has been identified and developed. Certainly there needs to be clarification of what is expected to take their place as means of professional improvement and communication across state lines.

The Regional Conferences in Vocational and Technical Education, instituted for the first time early in 1965, were supposed to offer a better approach. Based upon the nine new regions, they were to be across-the-board, considering major problems and trends in all areas of vocational and technical education. As professional improvement conferences, they failed. As information conferences, they were at best, only moderately successful, by any criteria. The entire program was planned and presented largely by U. S. Office personnel. This was partly due to the hurried preparation for the conferences following final passage of PL 88-210.

However, a similar pattern was followed for the 1966 conferences. Nothing was heard in the states about these conferences until after the middle of January, a month away from the opening conference. Professional conferences involving vocational leaders all over the country

(Continued on page 244)



Cayce Scarborough

Theory and Practice

Timely tip for you and me. Take a sheet of paper. Write across the top the following: "My Learning Agenda for this Summer." Then, complete the form, get approved by your principal, or superintendent, supervisor, director, or dean and your wife. Tack it up where you can't miss it. Follow it.

Many graduating seniors are facing the toughest question that we can ask them. It is asked at home, at school, in the barber shop, the drug store—everywhere. Lots of seniors get tired of hearing it, because it really cannot (and should not) be answered yet. That is the question of "What are you gonna do?" Meaning, what is going to be your life's work? Of course, we sometimes ask the question out of interest or to make conversation. Let's try something else and help change the general notion that everyone oughta decide early what he is going to do and stick with it. That is one old American custom that needs changing. Let's help by understanding how vocationally mature a high school senior *should be*, and talk about *that*.

Vocational agriculture and the FFA are for farm boys who are becoming farmers, if I understand the opening paragraphs of a feature article in the February *American Education*, the national magazine put out by the U. S. Office of Education. The author ought to know what he is talking about. He is H. N. Hunsicker, Chief, Agricultural Education, and National Adviser of the FFA.

Why can't supervisors and teacher educators have a professional organization as effective for them as the NVATA is for teachers?

(Continued on page 244)

Theory and Practice

(Continued from page 243)

How do you teachers like the winners of letters on "What I Expect From My Professional Magazine"? Still a few of the prize dollar bills left if you want to get in on them. We will try to run one prize winner each month as long as the letters and the \$\$\$\$ last.

Have we examined closely our requirement and reverence for experience as a major criterion in all areas? *Learning experiences* or *work experiences*, when purposely planned and supervised, yes. But the flat requirement of at least x number of years as a teacher, a supervisor, or some other work lacks validity, insofar as I have been able to learn. Why don't we concentrate on trying to fit the person to the job ahead rather than asking the number of years he has behind him, and be real honest as to why we have these age barriers in our state plans and admission to graduate study?

Your letters, notes, and calls appreciated.

Cayce Scarborough

Letter to Editor

Dear Cayce:

Since you and I have both now turned the corner and are heading down the final stretch toward retirement, I find that tho I heartily approve your meanderings of the mind on the editorial page, I feel that our colleagues are to be pitied because they are being denied the pleasure of reading some of my own writings.

Consequently, I am submitting an article which I do hope you will have the good grace to publish.

Out of my many long years of quality experience, I have a good many tales which I would like to share with our readers. I plan to send you one each month, covering such topics as "Ways to Achieve as a Scintillating Supervisor" and "Hiatus and The Great Vocational Expansion."

Let me assure you that it is a great pleasure to join the ranks as a publisher just before perishing.

Cordially,
M. I. Stable
Professor and Head
Fam Life Department

Glad to hear from you, M.I., and to

The Regional Conferences are Dead

(Editorial—continued from page 243)

cannot be effectively planned on such short notice. Evidence of the validity of this statement is indicated by the mimeograph received from the U. S. Office attached to the skeleton program carrying this bit of news—"Efforts will be made to notify program participants of their assignments in advance of the conference." This is program planning?

Even with better programs, the question remains, can the across-the-board Regional Conferences in Vocational and Technical Education substitute for the old Regional Conferences in Agricultural Education as the major means of professional improvement outside of one's home state? The answer seems clearly to be NO. First, attendance is limited and is apparently by invitation of the State Directors. The only way that seems open to making these conferences of professional value to all in Agricultural Education is to work with AVA and make these "Little AVA Conventions". Whether our AVA staff could take time to plan and participate in 9 such conferences in addition to the annual convention is not known. It could be supposed that they could take the time if the Director and the Staff of the Division Vocational and Technical Education can spend 9 weeks in the conferences and what ever time they take to plan them.

Certainly it is clear that Dr. Walter Arnold and his staff do not want the Regional Conferences in Agricultural Education to be held, and they have been successful in killing them. If this is so, and it happens that I have recently collected considerable evidence that it is, then it would seem that Dr. Arnold and his staff would assume the responsibility to provide better opportunities for professional improvement of state-level leaders in Agricultural Education. If they cannot, or do not care to do so, then it would seem that they would encourage others in their efforts, or at least not block such efforts.

Cayce Scarborough

Themes for the
Agricultural Education Magazine

August — ORGANIZING PROGRAMS IN MULTIPLE TEACHER DEPARTMENTS

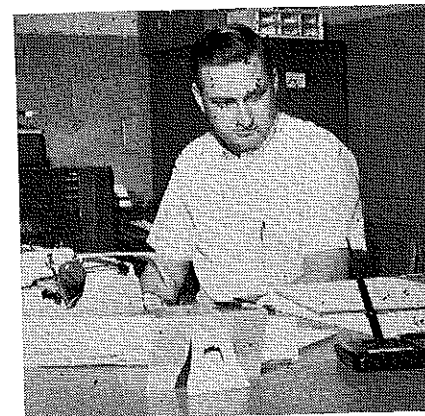
Major differences found in multi-teacher situations. Research in these situations. Trends. Division of responsibilities. How does the multi-teacher situation differ from the one-man departments? Will the one-man departments disappear?

September — PLANNING SUPERVISED PRACTICE FOR ALL STUDENTS

Emphasis on all students. Reports of programs designed for students with varying backgrounds in same class. Same for special classes for boys having no facilities for supervised practice. Relating supervised practice to teaching program. Summer programs of supervised practice. Relation to work experience programs.

October — IS ADULT EDUCATION GETTING LOST IN THE SHUFFLE?

Are we still in the business of adult and young farmer education? Is time allotted for this purpose? Full-time teachers of adults get results—reports of success stories. Adult education in agriculture for other groups as well as farmers—agri-business, industry, urban groups.

Is Your
Summer Program Showing?ALVIN HALCOMB, Jr., Teacher of Vocational Agriculture,
Citronelle, Alabama

Alvin Halcomb, Vo Ag Teacher

"Well, what are you going to do this summer?" "Guess you're going to enjoy a nice vacation now that school is out?" "Why don't you Ag teachers have to get summer jobs like other teachers?"

Sound familiar? Don't these questions burn you up? I mean—after all—well gosh, last summer I went by the Ag building at least once every week to stack up my mail and to keep a path through the tall grass! And, too, I saw the Principal once every month to make sure my payroll was mailed to the personnel office. Couldn't understand why folks asked such embarrassing questions.

Then one day I realized that maybe it would be a good idea to take a l-o-n-g look at my summer program. How could time be spent to accomplish the many things that needed to be done? How could I keep people from wondering what I did during the summer?

A list of objectives was made and included the following:

1. Regular office time:

Spend at least one hour each day at a definite time, preferable in the morning, in the office. This time could be utilized to answer and file correspondence, and to better plan the day's activities.

2. Visitation and supervision:

Visit all-day students either on their farms, home areas, or experience programs to offer advice and instruction as needed. As you know, the summer months offer many opportunities to see if approved practices taught in the classroom, shop, and laboratory are being put into practice. Summer is also a good time to work with young and adult farmers.

3. Course calendars, lesson plans, teaching aids:

Course calendars and lesson plans should be made for each class taught. Much time and thought will be required to do a good job. This work could well be one of the most important phases of the summer program. Look back over the past year and decide which units need more study, which units are not meeting the student needs, and what units should be added.

In developing teaching materials

by mimeographing study questions and other hand-out materials to give students, much time is saved by teacher and students. Stencils are made and copies run during the summer months.

4. Reference materials and visual aids:

Order reference materials and visual aids for classes. Films and filmstrip must be scheduled well in advance due to the great demand for good films. Here again much planning must be done. Films that arrive off the teaching schedule will have little value. Selecting films appropriate for the unit being taught is of paramount importance.

Reviewing and ordering reference books and materials should be done in early summer so as to have them on hand when school opens. Bulletins, charts, and other materials should be arranged for quick and easy use.

5. Recruiting:

Visit prospective students and their parents. This practice will help the teacher do a better job of planning, especially for the first-year students. An increase in enrollment will usually result, and this increase is desirable in many instances.

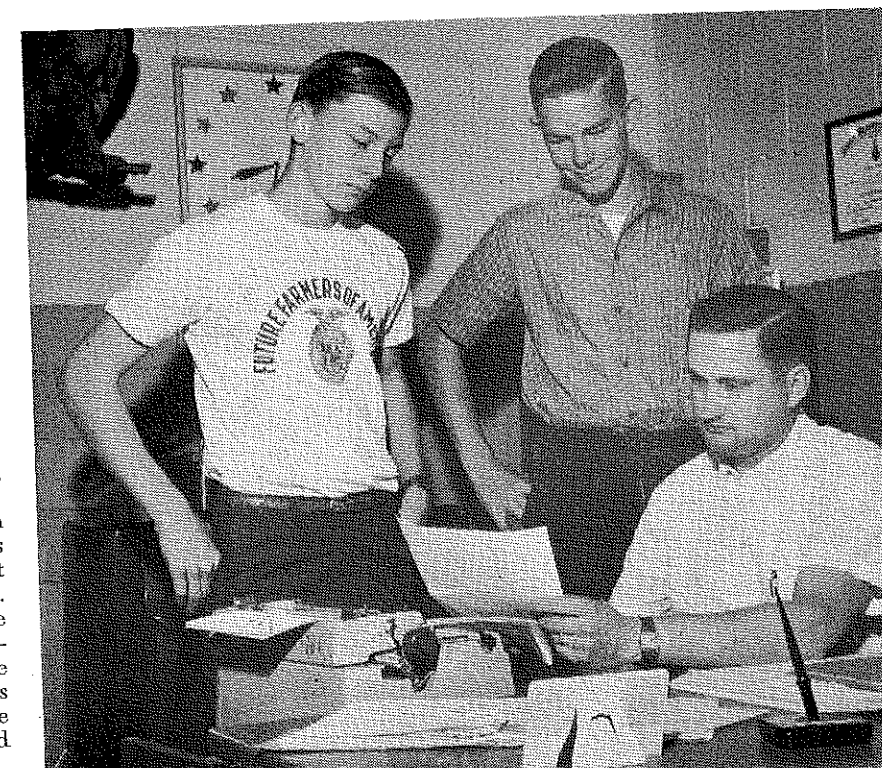
6. F.F.A.:

Conduct FFA officer training programs and hold chapter meetings. The summer months offer an ideal time for get-togethers to have fun and plan much of the year's program of work. More time is available for newly elected officers to become more familiar with their duties and responsibilities. Also, time will be required for FFA events such as state conferences and conventions.

7. Professional improvement:

Teachers should strive to improve themselves to become more efficient and effective. Graduate study during summer months is usually permitted. Many short-courses and workshops are offered, and the teacher should avail himself of these opportunities.

(Continued on next page)



Working with FFA members and officers during summer months leads to stronger chapter.

Summer School, A Must for 1966

N. K. QUARLES, Teacher Education, East Texas State University

For many years, we have heard that vocational agriculture is at the crossroads. There has been one crisis after another, but the teachers have always risen to the occasion and handled the problem at hand with great skill and to the satisfaction of people concerned with the program. We believe that they are intelligent enough and capable of handling the new problems as they arise.

The 1963 Vocational Education Act was a great boost to vocational education in the United States. It was an act to strengthen and improve the quality of vocational education and to expand the vocational educational opportunities in this country. It was the type of program that many teachers had looked forward to, but it found many unprepared to assume the responsibilities that it places upon us in agricultural education.

More Training Needed

In the fall of 1965, Texas had a few vo-ag teachers to start work on

Alvin Halcomb, Jr.

(Continued from page 245)

8. Vacation:

Yes, take a "real" vacation. One that the family will enjoy. Get away from it all for a few days and come home with a new lease on life.

Summary

No attempt has been made to cover all the different activities that need and are carried out during the summer months. In planning your summer work, this writer suggests that you first list all required or fixed dates such as conventions, conferences, short-courses, workshops, etc., and then plan your work and work your plan.

Should your program leave something to be desired, take a long look at what you have been doing and decide whether those "embarrassing" questions had any justification.

Is your summer program

a limited basis with the Cooperative Training Program. Most of these programs are reported to be doing very well. Although the teachers have had to change some of their methods and teaching techniques, there has been very little additional subject matter to master.

As the new year approaches, more teachers are adding the Cooperative Training Program in September, 1966. Many are being encouraged to work with the Pre-employment Laboratory Training Program, usually Farm Machinery Repair and Maintenance or Ornamental Horticulture. These two courses will require intensive training by a teacher who expects to have the knowledge and skill to do a competent job of teaching in these specialized areas. Many vo-ag teachers will need additional training to cope with the new demands.

Who Will Train the Teachers?

The best way to give these teachers that will handle Pre-employment Laboratory Training in their schools the additional training that they will need is to request that they take a three to six weeks summer course in the specialized other course they are to teach. For ex-

In-Service Education— A Teacher Need

J. C. McCLINTON, Vo Ag Teacher, Oxford, Alabama

Vocational Agricultural Education will improve as those who teach it acquire new knowledge and skills necessary to improve their performance. Rapid changes in all phases of our society challenge the teacher to continuously improve. Most of our mechanical devices eventually become out of date and obsolete. Teachers will find themselves in the same category unless they take advantage of continuing education to adjust themselves to new findings that

Professional development, so important a part of the teacher, can be stimulated and encouraged by thoughtful in-service programs.

New Needs

Each year vocational agriculture teachers are confronted with new situations that call for knowledge and skills other than those they already possess. They can learn these by the trial and error method in the privacy of their own classroom, but the learning acquired in



N. K. Quarles

ample, let's take ornamental horticulture. This training would be handled by a teacher trainer in an Agricultural Education Workshop course with the assistance of a university horticulture teacher. The teacher trainer would coordinate the course; the specialist would furnish the technical assistance and the laboratory facilities. Full-time would be needed for 3 weeks or half-day for 6 weeks.

Summary

1. Changes in the vocational agricultural program call for additional training or retraining of teachers.
2. This training can best be offered in the Agricultural Education Divisions of the universities.
3. Resource people who are specialists must furnish the technical assistance, including modern laboratories.
4. Summer school should be included in the plans of all teachers who need additional training for the new programs during the 1966-67 school year.

Summer Tours Can be Effective

CHARLES T. MILLER, Graduate Assistant, East Texas State University



Charles T. Miller

For many years vocational agricultural teachers in the United States have taken their students on various kinds of educational tours during the summer months. Some have been worthwhile and have grown in popularity and demand, while others have been a waste of money, time, energy and a source of trouble for the teacher who sponsored the trip.

Purpose

Like all other phases of our program, we must evaluate what we are doing. A teacher and his pupils will want to decide if the proposed tour is really worth while. Here are a few of the many questions that must be answered:

1. Is the tour to be educational in nature?
2. Will the tour benefit a large percentage of the students or only a few?
3. For what purpose is the field trip being planned?
4. If the tour is successful, will it fulfill the purpose for which it was intended?

Planning

If this is an FFA activity, the committee and the advisor will want to make suitable plans several weeks in advance of the proposed tour. Here are some of the details that must be worked out:

1. Route of travel and things to see. On a short one-day tour this may not be much of a problem, but on extended tours, it would be very important. Major oil companies will furnish maps and materials showing the scenic route and shortest route to any place in the country that you may wish to visit.
2. Transportation must be adequate, safe, and economical. A good school bus is hard to beat.
3. If a bus is used, the driver should be experienced, friendly, properly licensed and have an excellent driving record. He must cooperate with the advisor.
4. Each student must have proper financing and make his deposit well in advance.

to compete with other segments of education. If this statement is accepted, continuing education is a necessity for each individual vocational agriculture teacher.

5. Minor releases should be on file several days in advance for each student going on the tour.
6. A blanket insurance policy should be taken out for the entire group.
7. If the boys are to camp-out, adequate camping equipment should be provided. This is often available to schools through the War Surplus Property Depots.
8. If host schools are to make arrangements for the visitors, an understanding must be had about time of arrival, facilities needed and departure date.
9. Guided tours at experiment stations, ranches, farms, industries, parks and other places of interest must have prior approval.
10. Any tour, be it short or extended, must have the approval of the local school administration. It must be justified to the school officials and the community.

Summary

An educational summer tour can be worthwhile if it is well planned and properly supervised. The length of the period will be determined by the needs of the particular group, their finances, and how long the members can be spared from their work. But for a boy who has not seen farming or ranching outside his own community, a good summer tour can be very educational as well as recreational. Why not give it an honest try and then evaluate your results? It may give your students something to remember that they cannot get out of books or from any other sources. This is a small world, let's help our students see a little of it from the agricultural point of view.

If we are preparing our students for agricultural occupations, maybe they should not only see where the food is produced but how it is stored, processed and marketed.

J. C. McClinton

(Continued from page 246)

this way may be accidental and painfully slow.

As change and technology upgrade the skills and knowledge requirements of teaching vocational agriculture, the teachers' education can no longer be confined to the traditional college graduate level. Serious attention must, therefore, be given by the responsible practitioner to continuing their professional growth so that they can successfully analyze and solve their own problems.

In-service training programs should put into practice the best knowledge and methods available and can be scheduled as workshops, State conferences, group meetings, graduate programs, et cetera.

Whatever form the in-service program takes, it is obvious the personal needs and interest of the participants be determined. Identifying needs and interests can be done by following a cardinal principle of education. It is the principle of involving in the planning those who are going to be affected by it.

One approach to securing involvement of teachers in the planning of in-service programs is by developing questionnaires. This involvement has the disadvantage of restricting participation to the thinking of the person or persons who develop the questionnaire.

Teacher Committees

A second approach to involving teachers in planning is the committee method. The teacher committees may be organized on a state level with subcommittees organized in each district or area. The subcommittee could hold informal fact finding meetings in which training needs and interest could be identified. This approach should give each teacher a feeling of participation and recognition.

The members of the supervisory, administrative, and teacher trainer staffs, who through experience and a knowledge of the needs for continuing teacher growth provide an excellent source of leadership in initiating in-service programs.

The prerequisite for improving vocational agriculture is for those who teach to be equipped with valid information and be provided with training that will allow them

Eye Protection in School Shops and Laboratories

W. FORREST BEAR, Agricultural Engineering, University of Minnesota

Eye protection and safety laws have been written to protect eyes. The cost of work accidents to industry alone in 1961 averaged nearly \$65.00 per worker, including both direct and indirect costs, as reported by Williams (4) in 1963.

Industry has been concerned about safety and eye protection, thus laws have been passed. These laws, generally, did not apply to schools and State Labor Commissions did not have authority to enforce the law in schools. Schools have been lax in recognizing the hazards in chemistry classes, carpentry, welding, metal and auto mechanics shops as well as other vocational shops. The hazards are present and an accident could cause permanent eye injury.

The National Society for the Prevention of Blindness contends that at least one-half of all blindness could have been prevented (1).

Four percent of all on-the-job injuries claimed under the Workmen's Compensation Law in the State of Pennsylvania were eye cases. The average medical cost and wage compensation alone amounted to over \$400.00 per case and over \$2,000.00 for a permanent disability. With a high incidence of permanent injury, eye injury cases proved to be among the most costly of all disabilities (2). Action was taken in Pennsylvania as Act No. 116 of the General Assembly of Pennsylvania passed on July 19, 1965, stipulated that "eye protection devices" must be worn by students, teachers and visitors in school shops or laboratories when engaged in hazardous activities or exposed to danger (2). The following activities are listed as hazardous by the new law:

1. Use of hot, caustic, or explosive materials.
2. Working solid materials—milling, sawing, cutting, grinding, etc.
3. Tempering, heat treatment, or kiln firing of metals or other materials.



W. Forrest Bear

5. Repairing and servicing vehicles.

Eye safety devices used must meet the standards of the American Standard Safety Code for Head, Eye and Respiratory Protection, Z2. 1-1959, promulgated by the American Standards Association, Inc. (1). The eye safety devices should be worn by all students, teachers, and visitors in shops and in chemical physical laboratories.

Survey of States

Dr. Wayne P. Hughes¹ conducted a survey in 1965 to determine the status of eye protection in all states. The Ohio legislature in 1963, was the first state to pass eye protection laws for schools. The same protection was provided in Louisiana in 1963. Maryland and Massachusetts legislation was passed in 1964. Similar laws were enacted during 1965 in Alabama, Arkansas, California, Florida, Illinois, Iowa (Senate File 228)², Kentucky, New Jersey, New York, Oklahoma, South Carolina, Texas and Utah.

Other states contemplating passage of eye protection laws include South Dakota, Virginia and Wisconsin. The Colorado State Industrial Commission has the power to require eye protection in schools. The Hawaii state safety code calls for eye protection. Delaware, Georgia, Indiana, Minnesota and North Carolina

¹Wayne P. Hughes, Chicago, Illinois. National Safety Council. Eye Protection Legislation. Private Communication. 1965.

²Windol L. Wyatt, Des Moines, Iowa. Director, Vocational, Education. Private

failed to answer the survey. Minnesota, however, does not have such a law.³

In Summary, 20 states have laws that require 100 percent eye protection in school shops and laboratories and similar laws are being considered in four other states.

Who is Responsible?

As reported by Kigin (3) the possibility of public school teachers being involved in the school shop is greater today than in any period of educational history. Tools and machines are used in the vocational shops and laboratories and the teacher has the responsibility to make learning a safe process.

Accidents will happen. There is a dual responsibility for the teacher to provide a sound educational instruction program and the school district to furnish adequate tools, equipment and facilities.

An Administrative problem involves the financing of the eye safety devices. The Pennsylvania law provides that schools can use federal, state and local monies to purchase the eye safety devices needed. Fifty percent reimbursement from P.L. 88-210 funds will be allowable for this equipment. (2).

Students may be required to purchase the eye protection devices. If glasses or goggles are shared there is the possibility of eye and/or skin infection unless a disinfection program is established and enforced.

One lost eye cannot be justified when safety glasses can be purchased for \$3.50 to \$7.00 and can be worn a lifetime.

There are basically four types of eyewear (1) safety glasses with side shields (2) flexible plastic coverall goggles, (3) cut goggles for welding, and (4) face shields. When ordering eye protection devices state that the protective device must meet the standards set forth in A. S. A. Code Z2. 1-1959, specify the type of hazard or operation for which eye protection is needed and deal with a reputable manufacturer or distributor. The A.S.A. Code and federal codes specify that both lenses and frames should be marked with an identification of the manufacturer.

(Continued on page 251)

³G. R. Cochran, St. Paul, Minnesota. State Supervisor, Agricultural Education.

Guidelines for Planning and Conducting Cooperative Work Experience Programs

HAROLD ANDERSON, Assistant State Supervisor, Colorado



Harold Anderson

The value of adequate and realistic occupational experience has long been recognized by agricultural educators. The increase in the number of schools providing training in off-farm agricultural occupations has created many problems as how to provide occupational experience for students enrolled in these programs. In many schools occupational experience in off-farm agricultural occupations can best be provided by means of a cooperative work experience program.

The philosophy and concepts of cooperative work experience are quite similar to those of the traditional "Placement" for farm experience. However, the placement of students in agricultural businesses and industries for occupational experience involves some facets which are not common to the placement of students on farms or ranches.

The Study

With the above considerations in mind, the writer undertook a study to identify guidelines for local teachers and administrators to use in planning and conducting cooperative work experience in off-farm agricultural occupations.

Vocational agriculture teachers from 44 States who were conducting cooperative work experience programs in off-farm agriculture responded to a questionnaire which requested a rating of the importance of various activities and procedures associated with planning programs.

Distributive Education teachers from 20 States and Trade and Industrial Education teachers coordinating cooperative programs in 17 States were also included in the study. A total of 317 teachers responded to the questionnaire. This represented 83 percent of the teachers selected to participate.

The teachers were asked to rate the importance of a tentative list of guidelines that were developed by a review of the literature and

the writer's knowledge of the procedures employed by the various vocational services.

The teachers rated the tentative guidelines and procedural activities using the following five-point scale:

- 4 of extreme importance
- 3 of considerable importance
- 2 of some importance
- 1 of limited importance
- 0 of no importance

The guidelines listed below received a mean rating of at least 3 (of considerable importance) by the combined groups of teachers. Those marked with an asterisk (*) received a mean rating above 3.5 as being extremely important in planning and conducting cooperative work experience programs.

1. A written local policy statement should be developed to help in administering cooperative work experience.*
2. An advisory committee should be organized to give guidance and direction to the teacher-coordinator.
3. A survey of the appropriate businesses and firms in the community should be conducted before students are placed in training stations.
4. Systematic and comprehensive efforts should be made to promote the program to students, school personnel, and the public.*
5. A well planned and systematic method of selecting training stations which considers definite standards and criteria should be employed to insure the best possible training environment for the student.*
6. The school should have a definite plan for screening and selecting students that conforms to local school policy, satisfies cooperating employers and meets student needs.*
7. A concerted effort should be exerted by the teacher-coordinator to insure that the interest of both the student and the employer are considered when a student is placed for employment in a training station.*
8. A written training plan which lists the learning activities the student should engage in at the training station should be developed to serve as a guide to the employer in offering on-the-job instruction and to the teacher-coordinator in planning and teaching related instruction.
9. A written agreement between the school and the employer which lists specific responsibilities of the parties or individuals involved should be developed for students placed in cooperative work experience.
10. Adequate and appropriate facilities are essential and should be made available in schools conducting vocational cooperative work experience programs.*
11. The school should provide sufficient instructional materials to supplement the teaching of related classroom instruction and reference material related to the areas of work in which students are being trained.*
12. The related classroom instruction should be organized and planned so as to provide the information and experience which is not taught on the job and is necessary for students to progress in the various occupations.*
13. The teacher-coordinator should have an organized and systematic plan for visiting students at their training stations so that related classroom instruction can be correlated with on-the-job training.*
14. Employers should have the responsibility of providing adequate and timely instruction and supervision of the student while they are working in the training station.
15. Certain records and reports should be kept to help insure sound operation of a vocational cooperative work experience program.*
16. Achievement in both classroom related instruction and performance on the job should be considered in evaluating students.*
17. The school should maintain an organized system of "following-up" cooperative work experience of students after graduation.
18. The vocational cooperative work experience program should practice a continuous and planned program of evaluation.*

What Adjustments Should Vocational Agriculture Make to Better Serve Adults Under The Vocational Act of 1963?

EUGENE S. WOOD, Teacher Education, Southern Illinois University

G. S. Zimmerman, Flora, Illinois, vocational agriculture teacher, is one of these who have put into practice the broader opportunities and responsibilities opening to vocational agriculture education under the Vocational Act of 1963. This year he organized his first adult class for business and professional men of the Flora area who have an interest and need for agricultural knowledge.

The Act gives vocational agriculture the opportunity and responsibility to serve all who need knowledge and skills in agriculture in their work rather than just farmers and prospective farmers. Much of the time and effort in planning new programs to serve this broader clientele has been directed toward the high school and post-high school programs of vocational agriculture. One can find few suggestions for broadening what has been one of vocational agriculture's most efficient phases of instruction—the adult education program. This phase has been more efficient because the adults in the classes have been nearly 100 percent employed in agriculture.

Flora Township High School, located in Clay County in Southern Illinois, serves Flora, which has a population of 5,500 and 170 square miles of the farming community. The high school enrollment is about 550 students with 57 enrolled in the high school phase of vocational agriculture. Zimmerman, a vocational agriculture instructor for 23 years, has taught the high school classes and tried to serve the needs of adult farmers with one or more well attended adult classes each year.

New Course

The new course Mr. Zimmerman organized and offered during the



Eugene S. Wood



G. S. Zimmerman

standing Farm Operations." The class met in the high school Agriculture Department once a week for 10 meetings, each two hours in length. The class had an average attendance of 17 members. At the ninth class meeting, Zimmerman gave an information form to the members to evaluate the class and to be used as a guide in planning future classes of this type.

An advisory committee was used in planning the course and recruiting class members. Ten of the class members were contacted by this group; the other six found out about the class either through the newspaper or the agriculture teacher. In the past, advisory committees for adult classes in vocational agriculture have been used with a great deal of success. It would appear that there may be an even greater need for this type of help when classes are planned to serve persons other than farmers, who need knowledge in agriculture.

Reason for Attending

When the sixteen class members were asked the reasons they attended this class, eleven indicated that the business they represented served a high percentage of farmers. Eight of the members were owners of farm land, and twelve also said they had a general interest in agriculture. It appears that in rural communities many of the business

educational programs in agriculture for one or more reasons.

Winter has traditionally been the season for adult education classes in vocational agriculture to avoid the rush work seasons of farmers. Although this class was offered in the fall and was well-attended, it appears these business and professional men also prefer winter as the time most convenient for attending classes. If vocational agriculture is to serve the needs of all adults in the community who need knowledge and skill in agriculture, it appears special teachers, in addition to the vocational agriculture teacher, will be needed for adult classes in the winter.

Mix Classes

There also may be opportunities in some courses to teach adult farmers and business men in the same classes. When asked what type of groups they preferred to attend class with, nine of the 16 members indicated they would prefer classes made up of one-half farmers and one-half business men. Seven preferred classes of mainly business men and none wanted to be in a class composed mainly of farmers.

When this class of professional and business men were asked when they chose their present occupation, 12 checked "after leaving high school." Only one of the 16 class members had taken vocational agriculture in high school.

Conclusion

It can be concluded from the success of this class that well-qualified vocational agriculture teachers have the knowledge, sources of information, and the teaching skills to serve business and professional men in our rural communities who need additional knowledge and skills in agriculture. There is a large adult group of this type in most rural communities. If they are not served, it is possibly due to a lack of initiative or lack of time on the part of the vocational agriculture teacher who is already overloaded with high school students, general school duties, and adult farmer classes. If lack of time is the major factor for not serving this group, it might be well for agriculture teachers to evaluate the use of their time to see if it is being spent

A Tale of Adultferus Education

Professor M. I. STABLE

A young teacher of vocational agriculture was thoroughly convinced of his responsibility of furthering adult education in the community where he was employed. He heard from one of the school patrons that the Superintendent of Schools was not very interested in adult education as a part of the local school effort. Sincerely wishing to really find out about the matter he asked two farmers (whom he had become acquainted with at the church he attended) if they thought the school Superintendent was in favor of adult education. Each of these persons replied that they hardly thought the 'old gentleman' was in favor of anything that might be of a progressive nature. One even remarked that "Probably if you want to do anything worthwhile you will just have to do it in spite of the 'old gentleman' because he pretty well follows along with that conservative group at the other church."

Now the teacher was faced with a problem, how could he be a loyal member of the faculty and still carry out his responsibility for providing adult education for farmers. Well, at least he could avail himself of the assistance of his new found friends. He asked a number of these men if they would serve on an advisory committee. Four men agreed to serve and were later joined by three more of their friends.

First Meeting

Plans were completed for an organizational meeting. The teacher, desiring to get the right men in office, decided to limit the invitations to this meeting to a group of about twenty persons approved by the advisory council. In fact the advisory council made the selection of those to be nominated prior to the organizational meeting.

After the men so nominated had been duly elected without opposition, the group heard a brief statement from the teacher as to what he thought the nature of the organization should be. He told them

tion and by-laws, but he really felt that the organization might work better without being restricted to rules. The teacher also assured the group that he would arrange an educational program for them each time they met. He was not sure just what he might have for the next meeting, but it would be something worthwhile. After an informal discussion of some length about how little interest the businessmen of the town had in the farmers' welfare the group gradually dwindled down to the teacher and three members of the advisory council. Two of these were also newly elected officers. One asked about recruiting new members but all agreed this should be the job of the teacher because 'after all, he knows just who he wants attending.'

Next Meeting

Two days before the next meeting the agriculture teacher called his friend and former college professor at the university to inquire if he would come out to speak to the group on fertilization, but unfortunately the professor had another engagement. After frantically calling four other persons, the teacher finally secured the services of a district sales supervisor for a commercial livestock feed company, who told the teacher he had a good film on 'caged layer operations' which he would show to the group. The teacher was somewhat relieved to get a speaker. He felt that the presentation would be interesting even though he knew of few people in the community who had any poultry. The teacher told all of his students to tell their fathers about the meeting. He forgot to tell the sophomore class, however, and this was the largest class.

The rather small group of eight people who came out to the meeting could probably be ascribed to the fact that it was threatening rain and also was a good "TV" night. In fact only two of the four elected officers attended. The speaker extolled the virtues of "CAGED LAYER" feeds and

urged those present to get rich quick by going into the caged layer business. Few questions were asked and the speaker later told the teacher that he felt 'these people just plain don't know what's good for them'.

Other Meetings

The teacher found out that the ACP, a county committee, was holding meetings to explain the new program. He contacted the chairman of the county committee and was told that the county agricultural agent was arranging these meetings. The teacher called the agent and told him he felt that they should have the meeting at his department. The teacher made little preparation for the meeting, and although 21 farmers came in to the meeting, there was a considerable amount of dissatisfaction expressed by those in attendance. They argued with the speaker and the meeting finally broke up in a rather disorganized condition.

The next meeting the teacher arranged for a film on construction of silos. Only 7 people came to this meeting and the next meeting had only 3 in attendance.

The teacher is now thoroughly convinced that adult education of farm people is something for the birds.

W. Forrest Bear

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The Wise Owl Club, as of 1963, had an exclusive membership of 23,864 members who were owners of 29,830 eyes saved as a result of having safety glasses in place at the proper time (4). If an accident occurs the Club will be happy to know that you had safety glasses and can join the Wise Owl Club. Yes, eye protection is important—can't you see?

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Meeting Camp Liability Insurance Needs

J. M. CARTER, Director, New York State F.F.A. Camp, Lyons Falls, New York

Those of us connected with a camp are well aware of the various kinds of insurance available for the protection of the organization; for the protection of the individuals connected with the camp in various capacities; and to meet the needs of the campers. These kinds of insurance are:

1. Workmen's Compensation
2. Fire (also extended coverage, including wind in some areas)
3. Federal Insurance Contribution Act (Social Security)
4. Sickness and Accident, including staff
5. Comprehensive General Liability, including vehicles

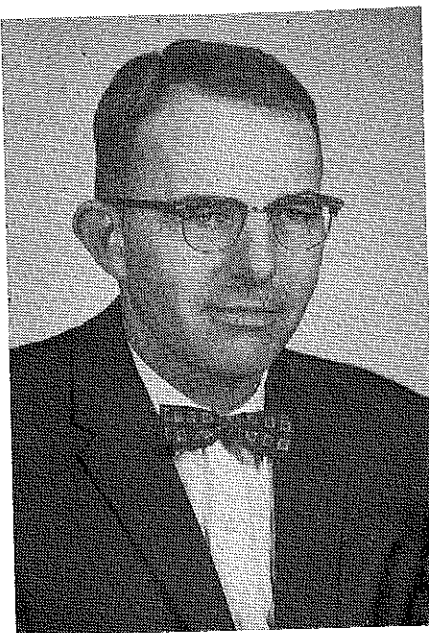
This article will be concerned primarily with Liability Insurance, which is the most expensive and, possibly, the least understood. Webster defines "liability" as "the state of being responsible for a loss."

In today's society, we are all aware of the needs for this kind of insurance.

Most business organizations are incorporated under the laws of their own state, or some other state. It is my understanding that one of the main reasons for incorporating is to prevent one or all members of the board that controls the organization from being individually, or collectively, responsible for any financial losses, whether they be from debts, or from a negligent act. However, a legally incorporated business, such as an FFA Camp, may be sued by a camper, parent, or the general public. Therefore, Comprehensive General Liability Insurance is needed to protect:—

1. The organization
2. The directors or members of the governing board
3. The employees

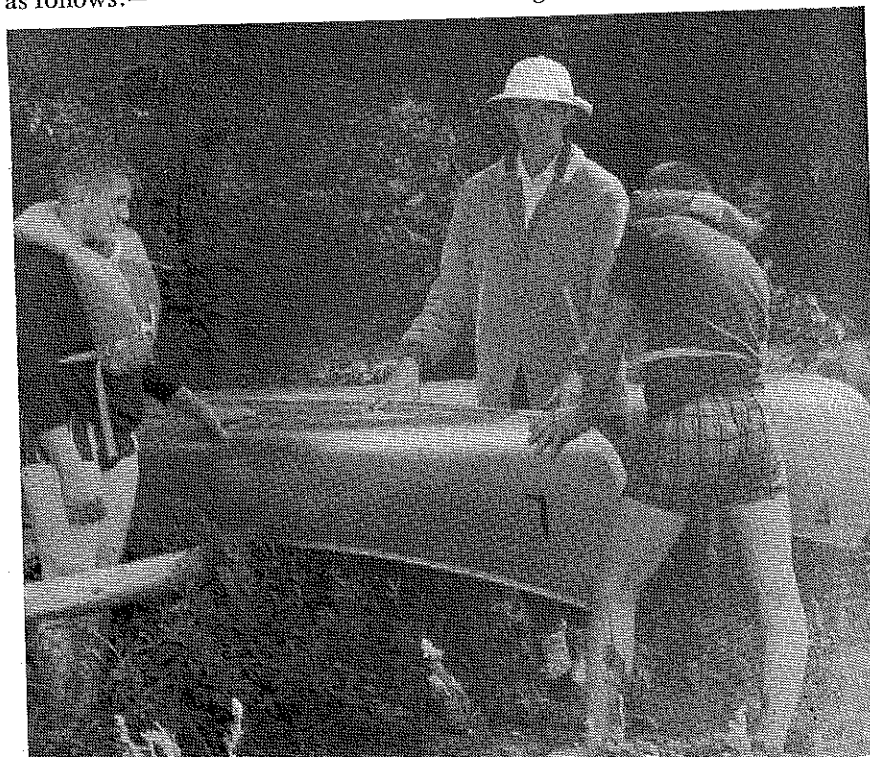
Negligence must be evident or proved before an insurance company will pay a liability claim. The important thing is that the insurance company will protect your interest by making their own investigation if a claim is made, provide legal assistance, and pay claims as



Julian M. Carter

It is our job then, as members of camp governing boards, and employees of camps, to provide the kinds of liability insurance needed, together with safe facilities and programs supervised by capable employees.

General Camp Liability Insurance involves five (5) classifications as follows:—



1. The first, and probably the most important, is *premises and operations*. This covers all premises owned, rented, leased, or controlled by the assured, including automobiles on the premises. It covers all camp operations, including hiking, hunting, fishing, boating, games, swimming, etc.—whether on or off the premises. Additional charges are made for some of these activities.

The premium is based on per hundred camper days; number of boats or canoes; number of outboard motors; etc. For our New York Camp, the annual cost is approximately \$6.00 for each 100 camper days; \$1.60 for each boat or canoe; and \$5.00 for each outboard motor. Although we do not have riding horses, the liability insurance for each animal would be about \$60.00 annually, with a minimum 50% charge for part of a season . . . or \$30.00.

Immediate medical and surgical insurance is sometimes provided, but seldom used.

2. *Elevators*:—Most camps do not have elevators, but the word "if any" should appear on the policy, just in case one were installed mid-year. A year end audit made by the Carrier would note the elevator, charge for same, and the assured would be protected under the conditions mentioned above.

3. *Independent contractors*:—Here again this item should appear

on the policy in the proper place on an "if any" basis. For example: A contractor is hired to place a new roof on one of the buildings during the camping season, and a board falls off the roof, injuring a camper. The aggrieved party probably would sue both the contractor and the camp inasmuch as the accident happened on the premises. On audit, the Carrier would charge a premium, if any, and the camp would be protected. It is highly recommended that all persons or parties hired by the camp, like caterers, contractors, etc. have their own insurance and furnish you with a certificate of same, both liability-wise and compensation-wise.

4. *Products coverage*:—Chances for claims are remote, but this should be placed on the policy, as the premium charge is about \$10.00 per year. This protects camps for claims from food poisoning arising after the camper has left the premises, or from anything made at camp and taken home and later causing an injury—such as woodcrafts, leatherwork; etc. Most Carriers will not put this on an "if any" basis. Either a premium is charged for it, or it is excluded.

5. *Contracts*:—Place on a policy on an "if any" basis. For example, this would cover the following types of contracts:—a lease of premises, easement agreement, and elevator maintenance agreement. It is always a good policy to inform your insurance carrier of any written contracts. Usually there is no charge, but if they fell outside the above mentioned category, there would be no coverage even on an "if any" basis if a premium were not charged for them. It is important to remember that if the word "if any" appears on the policy to cover elevators, and independent contractors, protection is in force as the cost would be included when the policy was audited at the end of the year.

The limits of the liability are becoming increasingly important. Additional coverage is not too costly, and it would seem that bodily injury, whether by automobile or not, should be at least \$100,000 each person; and from \$300,000 to \$500,000 for each accident.

As of May 1, 1966, policies will be written to state per occurrence, instead of per accident. This is a broader . . .



Mechanical devices of all types present hazards for campers.

cost. Also, after May 1, 1966, all Comprehensive General Liability policies will include all employees. This, at the present time, is accomplished by special endorsement, which cost our camp only \$33.80 during the past year.

It is difficult to talk about lia-

bility insurance without mentioning automobiles. In New York State, automobile liability insurance is compulsory. In addition to camp-owned vehicles, it is recommended to include hired automobiles and non-owned automobile coverage.

(Continued on next page)



Seaplane rides are an optional part of the program at the New York State Camp. The Adirondack Airlines Company provides the Camp with a certificate of insurance indicating the limits of . . .

Factors Related to the Enrollment of High-School Boys in Vocational Agriculture

HERBERT H. BRUCE, Teacher Education, University of Kentucky

A study "Factors Related to the Enrollment of High School Boys in Vocational Agriculture" made in Kentucky in 1965 revealed some interesting information.

Although the vocational agricultural enrollment in Kentucky has been increasing each year, the study revealed that some boys who had an opportunity for supervised practice were not enrolling. The study also revealed some boys who did not have an opportunity for supervised practice were enrolling. (Supervised practice in this study was used to designate the practice in farming carried out under the supervision of the teacher of agriculture.)

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Both of these coverages can be provided on an "if any" basis for an approximate \$20.00 annual minimum premium, and could prove invaluable.

Conclusions

1. Comprehensive General Liability Insurance is a "must". Out-dated scheduled liability contracts are hazardous and do not provide as broad coverage.
2. Be sure the limits of liability are high.
3. Have one Carrier write all of your liability insurance in one policy. If you have a large operation, it may be cheaper, but more important, there is less chance of omitting an important item of coverage.
4. Insurance Laws are not the same for all states.
5. Work closely with your local insurance agent. He knows your needs, State Insurance Laws, and is in an excellent position to advise you on protection needs.

Also, many insurance companies have safety engineers who will visit your camp, to advise you on how best to eliminate hazards. Even though protection is important, it is especially important that we operate our camps in such a manner that the campers and employees are ex-

The study attempted to determine: (1) What caused boys to enroll in vocational agriculture who did not have an opportunity for supervised practice? and (2) What caused other boys who had an opportunity for supervised practice not to enroll?

Boys, teachers of agriculture, and guidance counselors in 45 schools, five from each of the nine supervisory districts, were surveyed. There were 4,744 freshman and junior boys surveyed. These boys were grouped on the basis of their opportunity for supervised practice. They were then asked why they did or did not enroll. Teachers of agriculture were asked why they thought these boys did or did not enroll.

The 45 schools in the study were ranked on the basis of the percent of boys enrolled in vocational agriculture who had an opportunity for supervised practice. Teachers and guidance counselors from the top nine schools having the highest percentage of boys enrolled in vocational agriculture who had an opportunity for supervised practice were interviewed to determine the practices used in enrolling boys. The same was done for the bottom nine schools.

Thirty-six percent of the boys surveyed were enrolled in agriculture. Of the boys enrolled in agriculture, 89 percent lived on 10 acres or more land.

Vocational Agriculture Enrollment in Kentucky, by Years

Years	Enrollment			
	High School	Young Farmers	Adult Farmers	Total
1918 . . .	131			131
1928 . . .	3,059			3,059
1938 . . .	5,881	1,049	2,243	9,173
1948 . . .	8,123	2,340	2,764	13,227
1958 . . .	12,407	1,776	3,777	17,960
1964 . . .	14,850	2,227	4,405	20,892

Twenty-seven percent of the boys who did not enroll in agriculture had an opportunity for supervised practice. Twelve percent of the boys not enrolled were interested in being placed on a good farm for experience in farming. Of all the boys surveyed 44 percent expressed interest in training in an off-farm agricultural occupation.

The size of schools that the boys attended, whether they lived or worked on a farm, the size of farms, crops grown, livestock produced, machinery available, farming status of the father, and the occupation of the father had an influence on boys enrolling in agriculture.

Findings

Teachers of agriculture and others involved in counseling should realize the need for supervised practice in vocational agriculture. They should also understand why boys who had an opportunity for supervised practice did not enroll in agriculture and why boys who did not have an opportunity for supervised practice enrolled.

Certain practices were followed by more teachers and guidance counselors in the schools which were most successful in enrolling boys in agriculture who had an opportunity for supervised practice. These practices seemed to cause a higher percentage to enroll.

1. Boys who were interested in agriculture and could arrange for supervised practice were encouraged to enroll.
2. Beginning students and their parents were visited and the program of vocational agriculture was explained to them.
3. The counselor, principal, teacher of agriculture, other teachers, and parents were involved in counseling boys.
4. Information was secured on prospective students.
5. The schools' policies were

(Continued on next page)

Agriculture in Community and Junior Colleges

A Layman's Point of View

JAMES W. SELMAN, Associate Professor Voc., Tech. & Practical Arts Education, Auburn University, Auburn, Alabama

Can those of us interested in quality programs of agriculture look to the community or junior college as an institution in which

Herbert H. Bruce

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more lenient in enrolling freshmen than juniors.

6. The final decision on enrolling boys was made by the teacher of agriculture.

7. Counselors helped principals work out the class schedules.

8. The vocational agriculture program was publicized.

9. Key people were used to contact prospective boys.

10. The potential ability of boys to benefit from vocational agriculture was determined.

11. Boys interested in vocational agriculture who could arrange for a farming program, even though their fathers were not farming, were enrolled.

12. The teachers of agriculture were optimistic about the future of agriculture.

13. More curriculums were available, in the most successful schools, for students to choose.

Recommendations

1. Only boys who can profit from the training, should enroll in agriculture.

2. Boys and parents should be visited before boys enroll in agriculture.

3. Boys should make plans for supervised practice before they enroll.

4. Teachers of agriculture should work with the counselor, principal, and other teachers in enrolling boys in agriculture.

5. Teachers of agriculture should use key people to help contact and encourage rural boys who want to enroll and have an opportunity for supervised practice to enroll in agriculture.

6. The public should be informed about the program of vocational agriculture.

7. Boys should understand that vocational agriculture will help them learn to farm.

8. Boys should know that students who study agriculture in high school do as well in college as those who do not study agriculture.

9. Teachers of agriculture should help the principal work out a class schedule that will prevent serious conflicts for boys taking agriculture.

10. Teachers should be more lenient in enrolling freshman boys than junior boys in agriculture.

11. Boys interested in agriculture who do not live on farms should be placed on good farms to get farm experience.

12. Boys interested in training in off-farm agricultural occupations should have an opportunity to take agriculture.

13. Boys interested in agriculture should enroll all four years in high school.

Factors Which Influenced Boys to Enroll in Vocational Agriculture

Factors	Boys Enrolled In Vocational Agriculture	
	Number	Percent
Size of school boys attended (250-624 students)	1,124	68
Lived or worked on farms	1,501	89
Characteristics of farms where boys lived or worked		
Size of farms (10-249 acres)	1,333	79
Cash crop grown on the farms	1,301	77
Feed crops grown on the farms	1,344	79
Livestock on the farms	1,311	78
Adequate machinery available	1,301	77
Farming status of father (owner-operator)	1,036	62
Major part of father's income from farming	888	53

such programs are likely to flourish? If your answer is affirmative, what are some of the major problems that must be solved before quality programs in agriculture can be expected to develop?

Advantages of Junior College Programs

Snepp and Woodin, in a recent study,¹ indicate that approximately 30 percent of the public junior colleges studied (116 institutions in the total sample) list agriculture as a curricular offering. Since many states, such as Alabama, are beginning to expand their junior college programs and will possibly offer additional courses in agriculture—what are the advantages of offering agricultural programs in the community or junior college?

1. Many states have, or are in the process of establishing, community or junior colleges throughout their states. These institutions are recognized as institutions of higher learning and are offering college level work in many curriculum areas.
2. One of the great advantages of community or junior colleges is their relatively low cost for both the taxpayers and students. These institutions are usually less expensive for the taxpayer than are other college and universities, because junior colleges do not normally require dormitories, research facilities, and expensive professional and graduate programs.
3. Junior colleges are usually less expensive for students because the tuitions are low, and because students can live at home and avoid having to pay expensive room and board costs. Furthermore, it is frequently easier for students to obtain part-time or full time jobs to help finance their education; whereas, "good" jobs in a university town may be scarce.
4. Junior colleges offer a variety of services to students with diversified interests and aspirations.

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¹Neil O. Snepp and Ralph J. Woodin, "Agricultural Education Offerings in the United States," A Research Report of a Graduate Study, The Ohio State University, June 1965.

Supporting Education Among Vocational Programs

GLENN Z. STEVENS, Teacher Education, Pennsylvania State University



Glenn Z. Stevens

The recent state studies of competencies needed by persons to enter and to advance in off-farm agricultural occupations (1) have brought out many instances in which *supporting education* in business and office, distributive, and trade and industrial areas is important. The scope and degree of specific abilities vary greatly. This fact but adds to the compelling urgency for development of new patterns of instruction.

Emphasis in State Reporting

A reporting form, OE 4221, of the Office of Education (2) in use this year for the first time asks State Boards for Vocational and Technical Education to furnish data on *Enrollment in Supporting Vocational Education Courses*. Tabulation is made vertically and horizontally, meaning that each vocational program (service) is credited with numbers of students who received supporting education from another vocational education service and also with the numbers of students to whom supporting instruction was provided at least an average of one period per day for at least one semester.

Employment Data Examined

To appraise the need of administrators of programs for workers in off-farm occupations using knowledge and skill in agriculture to make appropriate supporting courses in business and office, distributive, and trade and industrial education available to students in their schools it is useful to examine manpower estimates. In general, the 1964 interview-type studies by agricultural educators (1) show that the largest numbers are employed in (a) marketing and distribution of agricultural supplies needed in farming, (b) in the processing and marketing of livestock and meat products, dairy products and fruit and vegetable products, (c) in ornamental horticulture, (d) in agricultural machinery sales and service

In several states the competencies that employers were asked to rate included equal samplings of agricultural, distributive and industrial knowledge and abilities. Managerial, technical and sales positions were judged to need more competencies and at higher levels but nearly all jobs were listed as needing some training in all three of the vocational fields.

Factor Analysis of Competencies

With foresight, and in an attitude of cooperation, off-farm agricultural occupations surveys in several states included distribution competencies and a sampling of abilities taught in trade and industrial courses. Factor analysis has been applied to the data as a descriptive, correlational technique. What might have appeared to be heterogeneous lists have been resolved into relatively small numbers of factors readily translated into major course content areas.

To ask employers to rate the importance of kinds of education that have not been readily accessible to their employees in the past may be unfair. Rural high schools have not offered distributive or industrial education. Only now are post high school vocational-technical programs coming within travel and financial range of most persons outside the major cities. The interviews have revealed that business leaders do indeed recognize needs for training and are willing to support new efforts in occupational education.

Agriculture as Supporting Education

Employers in businesses where some workers use agricultural knowledge, when hiring persons who majored in business and office education should be aware of facts such as are presented in Table 1. Understandable differences in the amounts of training needed by clerical workers are shown. Many students who major in business and office education in rural high schools find employment in agricultural businesses. They can profit from having been farm reared and in addition or in its place should have systematic instruction in agriculture with suitable content selection.

The *Standard Industrial Classification for Use in Distributive Education* (3) recommends that persons employed in other major fields be enrolled in distributive education if the job performed includes distributive functions. A similar interpretation may be made of the list of *Coded Occupational Titles in Trade and Industrial Education* (4). Workers in meat, milk, fruit and vegetable marketing, in floral design, and in rural petroleum distribution should have some supporting education in agriculture. Major oil companies are selling spray materials and fertilizers in service stations. They are asking for short courses (product knowledge) in agriculture for present (adult) employees.

(Continued on next page)

TABLE 1. Competency Needs of Clerical Workers by Type of Business

Agricultural Competency Groups	Rating by Type of Business			
	Agricultural Supplies	Agricultural Machinery	Meat, Milk, Egg Marketing	Ornamental Horticulture
Plant Science	high	medium	low	high
Animal Science	medium	low	medium	low
Ag. Business Mgt.	high	high	medium	low

Glenn Z. Stevens
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Agricultural Machinery

Table 2 shows needs for training that is well balanced among the three vocational education services. To have the necessary supporting education courses available means that the new programs in agricultural machinery retail sales and service probably should be in area vocational-technical schools. It is recommended (5) that courses in distribution or in industrial education might be prerequisites to placement for cooperative occupational education in agri-business.

The Educational Mix and Team Teaching

Is it likely that vocational education is more directly concerned with the concept of an *educational mix* than an *occupational mix*? Occupational guidance must be given to persons, each an integrated personality, who will enter and advance in particular occupations (6,7). Each occupation is a whole. It is the selection of courses which make up a training program for an individual that needs to be the best possible educational mix. A student should not be required to take all of the agriculture a school offers in order to get the parts he needs. Supporting education as a concept and as a curriculum reality may develop most efficiently in direc-

tions of true team teaching. The module organization of units of instruction for workers in more than one type of business encourages team teaching. Vocational education fields will achieve a new high level of effectiveness through cooperation in providing supporting education.

References

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5. Mason, R., Haines, P. *Cooperative Occupational Education*. Danville, Illinois: The Interstate Printers and Publishers, 1965.
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James W. Selman
(Continued from page 255)

rations to be associated in common activities—general education courses, cultural activities, and recreational activities.

America's need for personnel trained in agriculture and agricultural-related occupations in the future, requires agricultural programs to be developed in several types of institutions; colleges, junior colleges, community colleges, universities and technical institutes. The community and junior college has tremendous potential which needs to be explored and exploited fully by everyone interested in the development of agriculture and agricultural-related occupations at various levels of training.

Problems which need to be Considered

What are some of the major problems which must be considered and solved before successful agricultural programs can develop in community and junior colleges? I don't profess to have the answer, but I do have some thoughts on the matter. Certain conditions must exist if we expect to develop agriculture in these institutions:

1. Articulation problems must be worked out between the community and junior colleges, and the colleges and universities. In order to do this, planning committees must be formed and problems must be worked out to mutual satisfaction. There should be no form of dictation on the part of either group. In certain localities it may be practical for the junior colleges to establish pilot programs to help determine the feasibility of their offering certain agricultural courses.
2. Junior colleges need to offer programs to meet the needs of three distinct groups of individuals:
 - (a) Transfer education for students going on to four-year colleges—pre-professional education.
 - (b) Students enrolled that plan to enter the world

(Continued on page 259)

TABLE 2. Needs of Employees in Agricultural Machinery Sales and Service

Competency Factor Groups	Average Rating by Occupational Title				
	Manager	Salesman	Parts Manager	Book-keeper	Mechanic
Plant Science	high	medium	low	low	low
Animal Science	high	high	low	low	low
Agricultural Mechanization	high	high	high	medium	high
Business Economics	high	high	medium	medium	medium
Sales Skills	high	high	medium	low	high
Employee-Supervisor Relations	high	high	medium	low	high
Building Trades	low	high	medium	low	medium
Industrial Mechanics	high	high	low	medium	high
Industrial Quality Control	low	high	low	low	medium

When You Write That Article for the Agricultural Education Magazine

RALPH J. WOODIN, Teacher Education, Ohio State University

There are good reasons why each issue of *The Agricultural Education Magazine* should contain articles by teachers. From the reader's standpoint, 95% of whom are teachers, articles by other teachers, represent first hand experience for which there is no substitute either in agriculture or teaching. Such articles also represent new and recent experience. We are all interested in what happened last week, last month, and last year, and articles and periodicals are usually more timely and up-to-date than reference books.

Writing offers advantages to the writer. Each issue of the magazine reaches nearly 10,000 persons in the field of Agricultural Education thereby permitting a wide distribution of new and important ideas. Professional articles permit the teacher to take a concrete step in improving his profession. If he presents an idea which is tried by 100 other teachers across the nation, the whole profession will benefit. The teacher who writes also has the advantage of clarifying his own thinking and his ideas. Anytime that we write we present our ideas more accurately and precisely than in an oral presentation.

Why Not More Articles By Teachers?

At the Miami NVATA convention, the question was raised, "Why aren't there more articles in the magazine which have been written by teachers." The answers which were given should be helpful to those teachers who may wish to write for the magazine. The first reason that a limited number of teacher articles are used is that a relatively small number are received by the Editor. Teachers just don't write as many articles as

others. A second reason seems to be that some articles by teachers have submitted graduate papers, carbon copies of news items written for local papers or even clippings. Some teacher articles have had application only in one community or in one state. Some teacher articles have repeated other articles which have appeared in previous issues. On the other hand it was pointed out that some of our most interesting articles have been written by teachers and that there is a very real need for articles by teachers in each issue.

Another observation was that some of the teachers who have the most new and interesting programs of vocational agriculture, feel too busy to write about them and in fact do not write about them unless they receive specific encouragement from someone else. Perhaps the answer to this difficulty lies in someone, perhaps a state Vo Ag publicity committee, singling out those teachers who are making news and helping them in preparing suitable articles.

Getting Started

Assuming that the teacher has decided to write an article, there are certain forms and procedures which can help him to get his article published. Here are some suggestions to writers for *The Agricultural Education Magazine*.

These suggestions to writers, although not policies of the magazines, are for the most part derived from them. They are intended to encourage those who wish to contribute perhaps for the first time and to expedite the publication of these contributions.

1. Write articles which will have interest and value to the readers, a great majority of whom are teachers



Ralph J. Woodin

- Avoid a provincial or "one-state" point of view. Remember you are writing for teachers located in each of our 50 states as well as readers in most foreign countries. Your articles may be read by a teacher as far north as Alaska, as far south as Florida, as far west as California, and as far east as Maine.
- Write your article especially for the *Agricultural Education Magazine*. Graduate papers, speeches, departmental bulletins, research publications, and articles from state publications should be rewritten in order to be appropriate.
- Unless you are writing an editorial, keep your own personal opinion in the background, concentrating on what, when, where, who, and why.
- Document your ideas. References to research, to books and periodical articles often lend necessary support to your own ideas. Check back issues for the past four or five years to make sure that you are not repeating a previous article.
- Whenever possible, relate your article to a theme. Themes are announced in the April issue for each coming year and in other issues throughout the year.
- Provide appropriate pictures to illustrate your articles. Pictures should be clear and sharp. 5 x 7 single weight glossy enlargements are preferable to contact prints. Include captions but do not paste or fasten to the picture with paper clips. Use letters A, B, C, etc., on both caption and prints if more than one picture is submitted.
- Include tables, graphs, and line drawings if appropriate.
- Keep your articles brief and to the point. Most articles should range from two to six double spaced pages. A three-page typewritten double spaced article with one illustrative picture, a picture of the writer and headlines will occupy approximately one page, which to the editor, is a desirable length.
- Leave the upper ¼ of the first page blank, starting with your headline about 3 inches from the top of the page. In the upper right hand corner of the first page, give your name, the date the article was submitted, and the month in which you wish the article to appear.
- All articles should be typewritten and double spaced. This also applies to titles, footnotes, and photo captions.

Ralph J. Woodin

Continued from page 258)



Pictures like this help your article to communicate more effectively.

Suggestions on Pictures for Illustrating Articles

Pictures are important because they get the reader's attention and direct it toward an idea. The following suggestions will get your pictures published.

- The picture should illustrate an idea well enough that the reader gets the point with a minimum of information in the cut line.
- Teachers, students, and others should be shown in action rather than posed. An appropriate center of interest such as a basket of corn, a weanling pig, or a laying hen usually adds to pictures. Pictures of people shaking hands or pointing to objects are so commonplace that they suggest posed pictures.
- Outdoor pictures are preferable to inside pictures. When pictures are taken outside, however, the flash in sunlight technique should be used to eliminate facial shadows.
- A limited number of people should be included in the picture. For most pictures, not over from three to four people should be shown so that facial expressions can be seen. This suggests that close-ups taken from six to eight feet are particularly appropriate. When including livestock in pictures, the head of the animal may be more effective than showing the entire animal.
- The background of pictures should show some agricultural characteristics. Pictures from the west, for example, might include irrigation, mountains, and deserts. Pictures from the south might show such regional characteristics as tropical plants, Spanish moss, and cotton. Pictures from the east might include

specialized crops, or farm scenes typical of the eastern region. Central regional pictures should show examples of dairy, beef barns, and corn belt farming equipment.

- Pictures should be appropriate to the time of the year. Snow scenes for winter pictures are desirable, if snow is commonplace in your region. We need pictures which show spring plowing and harvest scenes in the autumn.
- Generally pictures should be taken with a light rather than a dark background. This is particularly important in pictures which are taken inside buildings and classrooms.
- Pictures should be submitted as 5 x 7 single weight glossy enlargements whenever possible. If you have a picture made from a negative, specify extra contrast for publication. Clear contact prints, at least 3 and 4 inches in size may also be used.
- Include a brief caption describing the picture and attach to the back of the picture with a ¼ inch square of Scotch Tape. The following is a desirable example of a picture caption:

Two former National FFA Presidents, each a farmer and agricultural commissioner in his respective state, review a copy of the convention program upon their arrival at Kansas City to attend the 1966 National FFA Convention. They are left to right: Doyle Conner, 1948-59, State Commissioner of Agriculture in Florida, and Gus H. Douglas, 1946-47, Assistant State Commissioner of Agriculture in West Virginia.

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(Continued from page 257)

of work after completing two years of a college—semi-professional education. It is in this area that the junior colleges need to devote the major part of their initial effort and then, as needs develop, move into the pre-professional areas. It appears that at the present this area is woefully neglected by many junior colleges.

- (c) Special adult classes—these are classes organized to meet special needs and interests of adults who are most often already gainfully employed. These courses would vary in length and may or may not offer college credit. More emphasis and time should be devoted to meeting adult needs in all junior colleges.

- Provisions must be made for continuous curriculum evaluation and development. Continuous research programs should be initiated by four-year institutions to assist junior colleges in program revision.
- All administrators, supervisors and faculty members must be committed to and have a firm understanding and appreciation for the concept of providing education to students in the three areas, pre-professional, semi-professional and special adult.
- Quality facilities and faculty must be obtained and be appropriately used in order to provide the kinds of educational programs that are required by agricultural technology of today and in the future. Senior colleges and universities will be used as research institutions in determining the facilities and faculty needed to do the job required.
- Community relations must be maintained through advisory committees by the junior colleges.
- Junior colleges must provide

(Continued on page 263)

What's Happening in Ag Ed Across the Ocean?

Have U.S. Agricultural Educators Been too Busy at Home to Look for New Ideas and Innovations Abroad?

THEODORE BUILA, Graduate Assistant, Cornell University, Ithaca, New York

A look into the foreign journals to which U. S. agricultural educators contribute indicates a near perfect score. Zero! It is nearly this when it comes to reporting the agricultural educational scene in other countries.

For too many years agricultural educators have acted as if they not only invented agricultural education, but also owned the patent.

Communication simply does not exist between United States and foreign programs. Good, sound, honest questions need to be leveled at college advisors and the inhabitants of the "think tanks" of vocational education across the country. Gentlemen, why has this area been left virtually untouched by research? Why haven't you felt a need for creating the communication networks for a mutual exchange of ideas between our country's programs and others? Why?

De Tocqueville, to my knowledge, did not spend words on describing agricultural education. However, the intrepid Frenchman of the 1800's did paint a word picture which sizes up the present situation and can be applied to agricultural education. He went on to say:

"An American should never be led to speak of Europe, for he will then probably display presumption and very foolish pride. He will take up with those crude and vague notions that are so useful to the ignorant all the world over. But question him about his own country, and the cloud that dimmed his intelligence will immediately disperse..."

Democracy in America
Vol. I, page 318

A dynamic agriculture simply cannot and will not support parochial attitudes when it comes to the training of its personnel.

Quality European Programs

tours are increasing. Map-in-hand, a few adventurous agricultural teachers are starting off on their own. The impression most bring home from Europe is one which could be graded "fancy." European agricultural industry is clothed in quality from Cyprus to Oslo.

Pears from Avignon at Le Halles, extra fancy peaches from Berona, and the veal on the white marble counters of Copenhagen and Ljubljana—all are tasty evidence of what Europe has been up to for the past 40 years.

These dynamic programs are divorced from the United States by an ocean. Even the staunchest critic is forced to admit that some of this progress was made without U. S. knowhow and assistance.

TABLE I
Selected Picture of Secondary Agricultural
School Types and Enrollment in 1960¹

Country	Full-Time Enrollment (1)	Full-Time Agricultural Schools (2)	Including Residential Schools
Belgium	5,316	98	Yes
Denmark	2,500	29	Yes
France	4,600	223 (3)	Yes
Germany	202,000	5,246	Yes
Netherlands	9,953	364	No
Sweden	2,251	62	Yes
Yugoslavia	15,523	87	Yes

(1) Includes winter courses.

(2) Programs lasting from one to four years.

(3) Including 34 mobile units, not included 14,000 students obtaining vocational training in agriculture as apprentices.

Note: In the year considered, 1960, there were over 300,000 students attending short courses in the mentioned countries plus Greece and Italy.

Speaking of Numbers

A glance at Table I gives an indication of the magnitude of European agricultural education on the secondary level. What it does not show is the immense number of short courses fitted to local needs. Each country has a different system. Each caters to tradition and

Upon closer study one often finds almost entirely different systems operating within the same country; this compounds the number of programs greatly.

Problems in Documentation

A very large hole exists in the documentation available on current European programs. What does exist often times only consists of statistical tables. Most agricultural educational programs extend beyond numbers in nice straight rows. The reader is faced with his own imagination as the sole source in construction programs; a dangerous and unfair proposition for researcher and country in question.

European reporters are just as hesitant as their American counterparts in publishing results of program failures. The result is an absence of important data.

Most of the studies reported are the combined result of several questionnaires. Often times these reports are published by editors without personal observation. On other occasions reports have been filed after short visits. This places the reader at a distinct disadvantage. Not only is he forced to scratch

for gleanings but he is initially robbed of information dealing with pilot and experimental programs.

Informal questioning of European Agricultural Educators
(Continued on next page)

¹OECD. "Agricultural Vocational Training in Europe and North America." Paris: Organization of Economic Cooperation and Development, Volume II, 1962.

Theodore Buila

(Continued from page 260)

European staff connected with agricultural education on both the International and National levels revealed that few Americans, and not necessarily agricultural educators, showed interest in European programs. The International Center of Agricultural Education in Bern, Switzerland—which gives courses in English—has not had an American in attendance by formal application for over five years.

Inquiries by the author to U. S. Governmental Agencies indicated that no programs had been funded for study of agricultural education as suggested in this article.

At least three major international organizations and several governments provide documentations written in English dealing with agricultural education.

The Food and Agricultural Organization of the United Nations publishes a profusion of material dealing with Near East and Asian agricultural education. Future emphasis will be on Latin America and Africa in addition to carrying on its previously initiated work.

The Organization for Economic Cooperation and Development, under the United Nations, contains a division for agricultural education and extension activities. Reports from this agency recently have dealt with planning and general information on the subject. Under the OECD, a Mediterranean Project has been started. This regional project is concerned with economic development in the countries of Greece, Yugoslavia, Italy, Spain, Portugal, and Turkey. Providing excellent possibilities for interested researchers are the OECD's reports, the resource personnel, and the students and instructors at the Centres for Advanced Agronomic Studies located at Bari, Italy and Montpellier, France.

The Educational Organization of the United Nations (UNESCO) has a division, headed by Mr. Nicholson, which deals in depth with agricultural education around the world. The problem with UNESCO's material is that much of this material is internal and not available for general circulation. Personal visits and conferences with staff members of UNESCO is sug-



Agricultural Courses—After completion of the Elementary Agricultural School (90% return to farming) students have the opportunity for enrollment in long winter courses which last two years. Shown above are students in a farm mechanics class in the Netherlands receiving instruction in equipment adjustment and maintenance.



Elementary Horticulture Schools—Several Dutch agricultural schools for students completing five years of elementary education have substantial enrollments of girls. All students live at home and commute daily. Girls are shown pricking tomato seedlings in the school laboratory.

Theodore Buila

(Continued from page 261)

gested for anyone anticipating this type of study.

Several private agencies in the United States along with our governmental agencies provide a limited amount of documentation in agricultural education outside the United States. Its availability is another question!

Ministries of Education and Agriculture in a few of the European countries provide publications written in English which deal with agricultural education. The publication from Holland entitled "Dutch Agricultural Education" is a prime example of what is available.

In the final analysis, perhaps the only way to get at specific innovations is through a visit to the source. Just how much longer the tenders of the purse strings will pooh-poo this type of research as unscholarly and of second class status is conjecture at this writing. If one intends to carry out such a study he should be prepared to have his personal funds taxed before it is over with.

The Need Re-emphasized

A healthy 10 percent "off the top" of the \$225 million appropriated yearly to vocational education via the 1963 Vocational Education Act is earmarked for research. This commanding testimony shows the importance taxpayers are placing on maximizing efforts in upgrading vocational education. It appears that the time is ripe for investment in the ideas of our European counterparts.

Hidden in the bottom drawer of someone's mind is a universal communication network which is going to service agricultural education. With it will come real collaboration, cooperation, and understanding. If it were operating today we would see country after country reacting to the same stimuli which are causing an acceleration in the rate of change in existing teaching programs in agriculture. This giant of agriculture with its expanding technology is repeating its growth pattern in countless countries. Certainly when we have a chance to exchange ideas why not take advantage of it? What is to be lost?

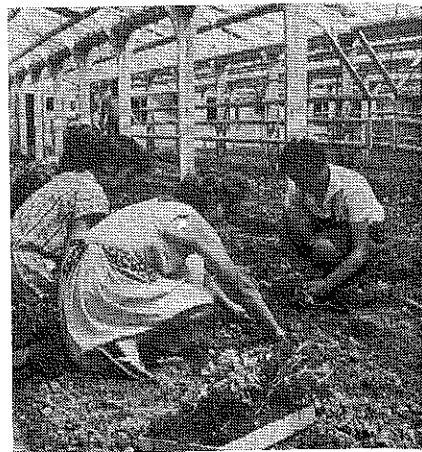
The present hesitation in the in-

to our problems needs an elixir. An awakening is being called for. It is suggested that mistakes could be avoided which would consume numerous months if this avenue of study would be pursued. Certainly this step can be written into programs. The lack of manpower and money is not the problem it once might have been. Let us get started!

Summary

In ending, let us turn our attention to the ideas, innovations, and practices being currently used in European agricultural education with success. By glossing over a few of the areas of interest it is hoped that the reader will field an idea or provoke a thought which he can focus on in further personal investigation.

1. *Residential Schools.* All but one country listed in Table I possesses agricultural secondary schools which are residential. Direct inquiries and personal visits can provide valuable information in the planning of U. S. residential agricultural schools.
2. *Job Profiles—Job Analysis.* Yugoslavia is one of several countries with agricultural schools offering several course options based on job analysis. Job profiles have been in preparation for about four years. Much of this work closely parallels what is being done here at home.
3. *Pilot School Farms.* The Netherlands have developed a series of practical school farms which provides about a week of directed work experience in special areas for students. These farms service several schools with extension personnel teaching the course work in some instances.
4. *Teacher-Farm Adviser.* In Luxembourg, Sweden, Austria, et al, the teacher at some point in his teaching career doubles as a farm adviser from a period of several months each year to once every three or four years. This dual role serves in-service education and "beefs up" the extension service from time to



Modern Facilities—At Celje-Medlog, Slovenia in Yugoslavia students work with new greenhouse facilities and adjacent fields (60 acres) applying technology gained in the classroom. Students complete 30 days work experience each summer and are supervised in small groups by teacher-demonstrators.

James W. Selman

(Continued from page 259)

- placement and follow-up services for all students.
8. All junior college students, not just college bound youths, must be provided with the opportunity to take full advantage of the services and activities of the college.
 9. Effective guidance services must be developed in the feeder high schools and the junior colleges. These services should be designed and operated to assist all students with their guidance needs.
 10. Articulation between the junior colleges and feeder high schools must be worked out cooperatively.
 11. Remedial programs must be developed in the junior colleges to insure an adequate background for those students who do not have the desired backgrounds.
 12. Enrollment in agricultural classes should be limited to those students who need the curriculum, want the curriculum, and can profit from the curriculum.

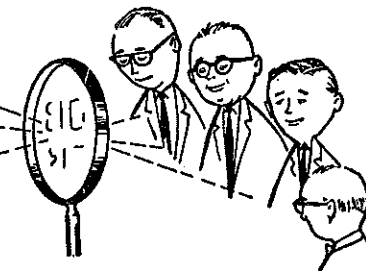
Agricultural programs for the future demands creative ideas and dynamic leadership. In this area alone, there is no limit to the cooperation that should exist among the junior colleges and the senior institutions. Leaders in agriculture must continue to think positively and to act aggressively, keeping as its goal service to youth, adults, and the nation in the forefront.

FOR TEACHERS ONLY

Only a few \$\$ left for best letters on "What I Expect from my Professional Magazine". Send directly to the Editor.

Jim Hannemann
Michigan State University

BOOK REVIEWS



RAYMOND M. CLARK
Michigan State University

Roucek, Joseph S., *Programmed Teaching: A Symposium on Automation in Education*, Philosophical Library, Inc., 15 East 40th Street, New York 16, New York, 1965. 194 pages, price \$10.

Mr. Roucek has drawn upon the experience and knowledge of thirteen education specialists in developing and editing an informative, comprehensive book about one type of automation in education. The book is not a series of articles extolling the virtues while ignoring the vices of programmed instruction, but is a serious, well written symposium of the advantages and disadvantages. A sampling of the thirteen different chapter headings are as follows:

1. Teaching Machines: Six Dangers and One Advantage
2. Teacher Education and Teaching Machines
3. The Programmed Textbook or the Teaching Machine?
4. Automation and Culturally Deprived Children
5. Instructional Television

Each chapter has a selected bibliography and many of the entries have a short annotation.

This book should be welcomed by individuals developing vocational education research projects utilizing programmed instruction as it provides a theoretical base for programmed instruction as well as practical examples and results of previous research. However, it is not limited to researchers as teachers and vocational personnel at all levels of agriculture education can benefit from its timely and pertinent statements relative to programmed instruction.

Tontz, Robert L., *Foreign Agricultural Trade*, The Iowa State University Press, Ames, Iowa, 1966. pp. 500, Price, \$7.50

"Foreign Agricultural Trade" is a collection of the writings of leading academic thinkers and trade practitioners. These writings give an overall picture of various aspects of trade: the theoretical framework and how it may be improved; new viewpoints on trade policy; the pros and cons of various trade programs; trade restrictions; trade stabilization agreements; the effectiveness of the General Agreement on Tariffs and Trade in regard to trade expansion.

The book is designed to acquaint students, teachers, and interested lay persons with a variety of opinions concerning our country's foreign trade policies. Writings were selected on the basis of their significance relating to actual problems, present and future; their representation of the scholarly progress of the present; and their coverage of principal viewpoints in the major areas of foreign agricultural trade. Over 80% of the content was originally published since 1960.

"Foreign Agricultural Trade", subtitled "Selected Readings," should be a valuable reference source for anyone with a basic knowledge of economics who wishes to learn more about the all-important field of imports and exports.

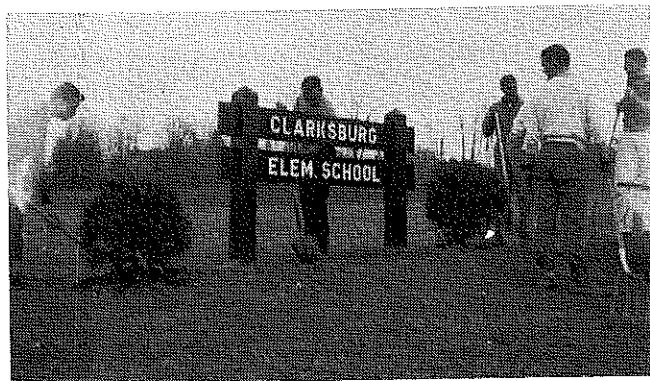
Robert L. Tontz is Chief of the Trade Statistics and Analysis of the Foreign Development and Trade Division, U. S. Department of Agriculture. Dr. Tontz has spent many years in research of foreign agricultural trade, and he has traveled extensively viewing U. S. trade policies in action.

—Guy E. Timmons
Michigan State University

Editor's Note: While Ray Clark is on leave to develop curriculum materials, Guy Timmons and Jim Hanneman have been assuming responsibility for Book Reviews. Thanks.—CCS

Stories In Pictures

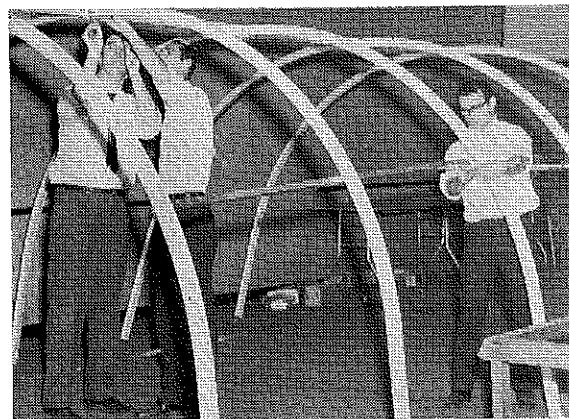
GILBERT S. GUILER
Ohio State University



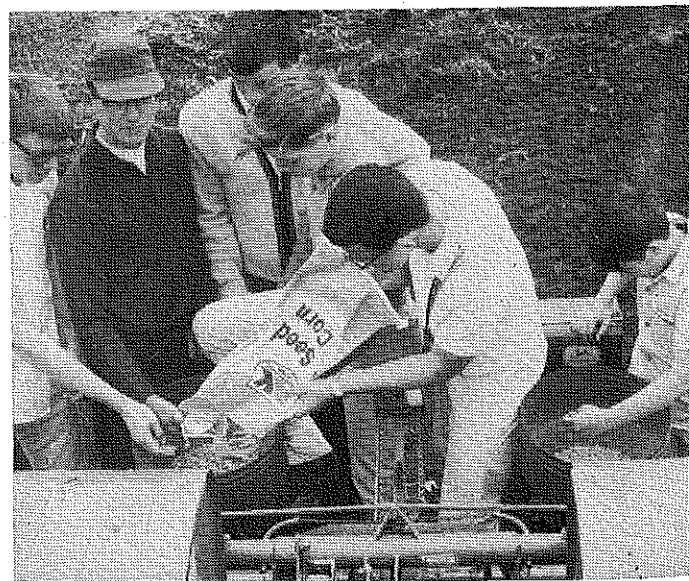
Gaithersburg, Maryland Vocational Agr. students complete a landscaping unit and planting arborvitae on the school grounds.
photo—J. Pope



Michigan Vo-Ag teachers learn cherry tree propagation facts for mechanical harvesting as a part of a recent seminar. photo by Timmons



Rhode Island teachers of Agriculture are shown erecting the frame for a plastic greenhouse at their Annual Convention. The completed exhibit effectively pointed out the rapidly increasing importance of plant science in the agricultural education program of the Northeast. Left to Right: John T. Leyden, Scituate High School, Scituate; John H. Ball and Albert

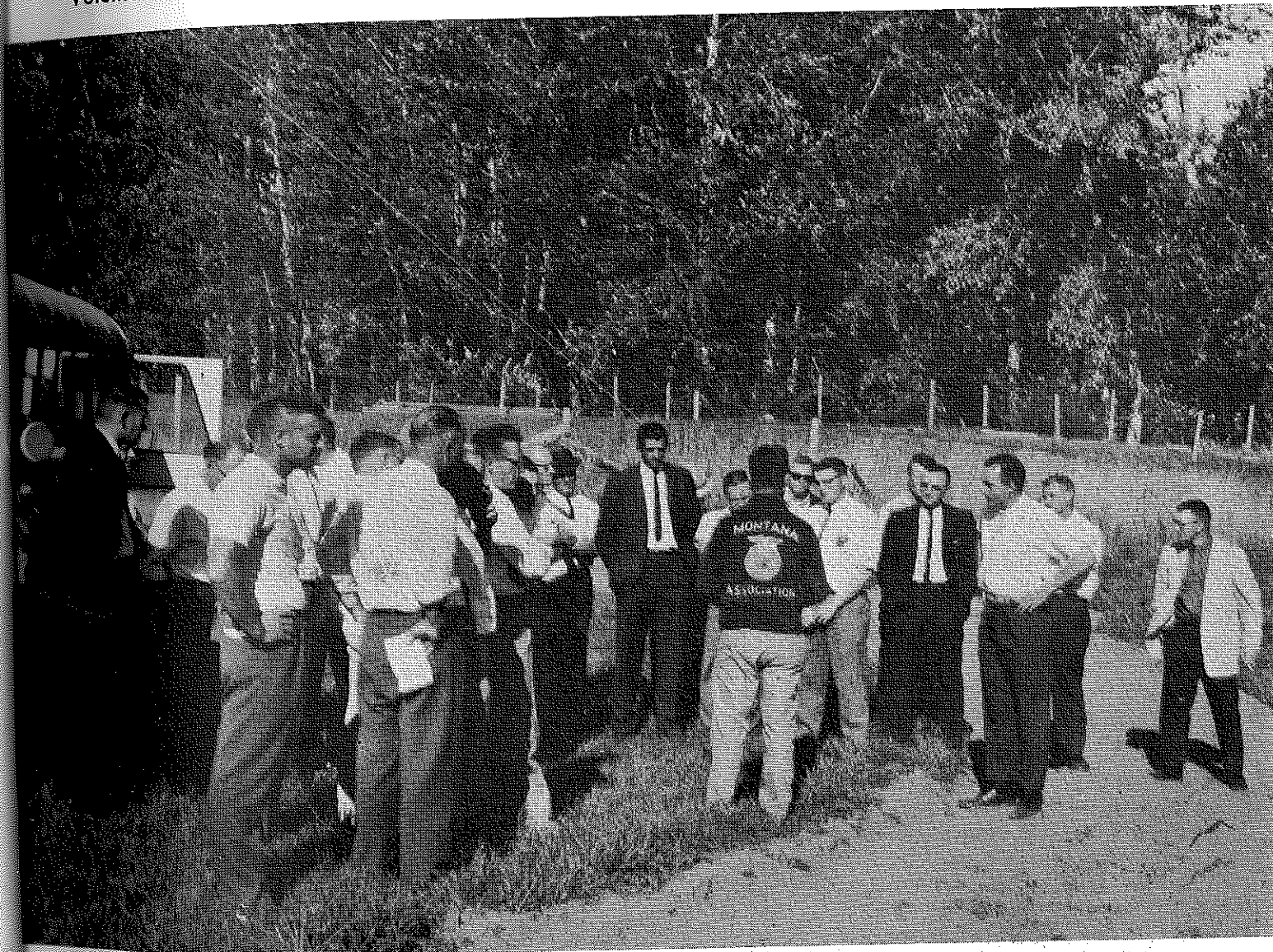


AGRICULTURAL Education

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Number 12



Montana Vocational Agriculture teachers and supervisors evaluate the total program of Vocational Agriculture in a community.

Featuring—

EVALUATING THE YEAR'S WORK