

Agricultural Education

JUNE 1965



Featuring "Making Your Summer Count"

The professional journal of Agricultural Education. A monthly, managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

The Agricultural Education Magazine

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THE COVER

Five of the fundamental Summer activities are depicted on this month's cover which comes from Illinois. The center picture shows Louis Templeton giving individual instruction in record analysis to one of his active students. Upper left. Adequate follow-up of adult instruction is facilitated at Herscher as Eldon Chapman conducts a summer follow-up meeting for his Corn Production class members. Upper right. Kent Durbin is performing the perpetual job of filing current teaching material and revising lesson plans for the next year's course of instruction. Lower right. Here a sectional group of teachers are shown attending an in-service training session on teaching a unit on plow adjustment and use. Lower left. The Vocational Education Act of 1963 brings the total picture of agriculture into focus. Here, Hugh Muncy of the Illinois Retail Merchants Association, instructs FFA officers about retailing agriculture products.

Editorials

From the Editor's Desk . . . Take Your Time

"I never have enough time to do the job right"! Vo-Ag teachers aren't the only people who have this complaint. Most professional people need much more time than they have.

June, the last month of the contractual year for most of us, is a good time to review the activities of the past year and during this process we often conclude that if we could do it all over again, we could have saved much of the time we spent or we could have budgeted our time more wisely among our various activities. The need for planning in order to make wise use of time during the next three months is emphasized in most of the articles in this issue.

How do successful teachers make the most of their professional time? For what they are worth here are some observations which might be of value as we look forward to another year which will no doubt make new and greater demands upon our limited professional time.

● **Establish a priority among the objectives of the department.** Concentrate on the guidance of learning. Some of the lower priority objectives may be less important than we had thought.

● **Estimate the hours spent in the past year on each major area of the program.** Some items such as class teaching are fixed time items which cannot be adjusted. Much of our time can be classified as flexible and can be adjusted as needed.

● **Discuss this time estimate with others, to obtain suggestions for improving it.** Your advisory



Ralph J. Woodin

committee, your administrators and supervisors can help. Your wife may have some ideas too.

● **Develop a revised budget for use of professional time for the coming year.** At this point consider your priority of objectives, your last year's use of time and the suggestions of others.

● **Become more efficient in those areas of the program in which you "retail" your time.** Individual conferences and farm visits are essential but time consuming. Group instruction provides an opportunity to wholesale your time.

● **Delegate responsibilities to others.** Make more use of student officers, advisory committees, farm reporters and secretaries to name a few.

● **Avoid peak loads by scheduling major events.** Keeping your evening meetings down to 2 or 3 per week helps in maintaining the mental health required for effective teaching.

● **Don't take yourself too seriously.**

And that reminds me that this is my last editorial. While the last three years have created some personal problems in budgeting time along with editing the magazine, the rewards have been commensurate. Among the greatest of these rewards has been a new appreciation of the interest, willingness of our profession and particularly our special editors to think, plan and look forward to improved programs of Agricultural Education.

Ralph J. Woodin

R. C. S. SUTLIFF, Chief, Bureau of
Agricultural Education, New York

Guest Editorial

Summer Service Imperative

Is twelve-month employment of teachers of agriculture defensible? It is, only if the summer period is made to count. Many teachers of agriculture throughout the United States have made their summers count and that is one of the reasons why agriculture has been one of the most successful and effective vocational programs in our schools.

Summer programs have been successful in the past in training for farming and summer programs will be essential if we are to have successful programs in the newer and broader fields of training in agricultural education.

I can think of no fields of preparation in the broad field of agriculture for which experience programs are not important. To prepare for farming, agricultural service, agricultural business, conservation and forestry, ornamental horticulture, and any of the other new fields of agriculture, on the job experience will be essential for effective training.

It is quite obvious that if summer experience programs are essential then teachers of agriculture are needed to help plan and supervise that experience.

We have been challenged by school administrators and by board members many times regarding the need for employment of agricultural teachers during the summer. But we have never been challenged in a school where the teacher carries on an effective summer program and lets the school officials, board of education, parents and lay public know what his summer program accomplishes.

Every teacher should file with his school administrator and his board of education a plan showing how he is to use his time during the summer in —

1. Providing for high school youth individual on-farm instruction and supervision.
2. Providing individual instruction and supervision to high school youth who need to gain experience in off-farm agricultural occupations.
3. Providing group and individual instruction and supervision for young and adult farmers and for other out-of-school youth and adults engaged in or preparing for jobs in off-farm agricultural occupations.

4. Advising at FFA meetings and supervising FFA activities.
5. Preparing for improved teaching through summer school, conferences, and workshops.
6. Organizing teaching material and planning for teaching.
7. Supervising the activities of the school farm, greenhouse and nursery if he has such responsibility in his school.
8. Providing for himself and his family a vacation.

Any teacher who conscientiously prepares a plan for his summer program finds that it is impossible to plan and do all of the worthwhile activities which are desirable.

He must then establish priorities. The above are all important, but perhaps the individual instruction and supervision are most important. Professional improve-

ment and vacations are important but if a teacher attends summer school for a three-week period then perhaps he should defer most of his vacation until another summer. FFA activities are important, but frequently I have observed that time spent on individual instruction and supervision would have been more worthwhile.

Submitting a plan to the school officials and board of education is important, but the real justification for a teacher's employment during the summer can be proven only when he provides the school officials and the board of education with a report of his accomplishments. When his program during the summer has been effective and when he lets the school administrator, board and public know the accomplishments there is little chance that his summer employment will be challenged. Rather, he will be commended for its effectiveness. Perhaps twelve months employment should be considered for all vocational services. □

L E T T E R S

Sir:

Thank you kindly for having written us as you did on March 12, relative to the Agricultural Education Magazine, and for enclosing with your letter copies of recent issues for our review.

We noticed the article entitled "New Farm Management Game Tested", which appears on page 166 of the Agricultural Education Magazine for January, 1965. We should point out that the Farm Management game, formerly available through us, was discontinued several years ago and our stock is completely exhausted. Therefore, those desiring to obtain the game should write the Big Top Games, Box 6252, Edina Station, Minneapolis 24, Minnesota, the manufacturer of the game, relative to availability.

Sincerely,
W. T. SCHNATHORST
Supervisor
Educational Services
International Harvester Company

Sir:

The article "The Professional Teacher and the State Program" by Robert Taylor in the Agricultural Education Magazine was a timely and important subject. The success or failure of vocational education in the immediate future will depend directly upon the professional attitude and performance of the teacher at the local level.

There is one responsibility of a professional teacher that was inferred in the list of ten responsibilities that probably should have been listed separately and underscored. That is—he must become involved with people outside the profession in developing the new program.

People have been involved in the past but we need to make greater use of them in the future. We especially need to expand the number involved at all levels to include those in the area of agricultural industry. A professional teacher will recognize the need to expand his advisory council to include representatives of this group in order to:

1. Acquaint them with the larger conception of agriculture.
2. To challenge them to identify jobs for

which knowledges and skills in agriculture are involved.

3. To secure their suggestions for educational objectives and training needs for those jobs.

Many teachers have been and are confused by the new legislation. The professional teacher will seek the aid and counsel of others in developing a program in his local community to meet the needs of those who can and should be served.

ROBERT HOWEY
Teacher of Vocational Agriculture
Sycamore, Illinois

Sir:

The article in your recent issue by Jacob S. Zigler, supporting the position that part-time farming is a way of life, was thought-provoking. I say thought-provoking because it caused me to reflect on my attitudes towards part-time farming when I taught Vocational Agriculture not too many years ago. The interests and aspirations of these folks didn't seem to fit the mold for the ideal program of Vocational Agriculture or the predetermined outcomes.

The economic aspect of part-time farming received more emphasis than it deserved and of course is debatable. The concern is for people! We must recognize that some part-time farmers will be our most aggressive citizens and our best leaders in the PTA, churches, and organizations in rural areas. The job of Vocational Agriculture is to recognize them and work with them.

Yes, the offspring of part-time farmers are candidates for the Vocational Agriculture classrooms. I strongly disagree with the author when he states that "Many of the Vo-Ag students will not be of the highest calibre". It seems to me that their only deficiency is in the area of experience on full-time farms.

I believe part-time farmers are interested in Vocational Agriculture offerings designed to increase their appreciation of rural living and adult programs designed to help make part-time farming more satisfying, profitable, or both.

I am confident that the new dimensions in Vocational Agriculture will include the challenge of helping to make part-time farming a better way of life.

Sincerely,
WALTER JACOBY
American Institute of Cooperation

Sir:

The article by Dr. V. E. Christensen, "Factors Influencing Classroom Achievement in Vocational Agriculture," should be of concern to all. Here is a man who has dared to trespass upon sacred ground and question the educational values of certain experiences directly related to time worn cliches regarding agricultural experience programs.

His article indicates that acquisition and retention of knowledge in the classroom is influenced by differences in student experiences in agriculture. Apparently, the mere fact that a student has an experience program does not guarantee his classroom achievement will be increased. This raises serious doubts concerning the educational value of agricultural experience programs. If an experience program will have little or no positive influence upon a student's classroom achievement why insist one be developed?

Dr. Christensen should be applauded for reminding us that the primary purpose for having agricultural experience programs is to increase teaching effectiveness and not winning awards or meeting requirements.

GERALD R. FULLER
Teacher Education
University of Illinois

Sir:

A recent issue of the Agricultural Education Magazine carried an article entitled "A Block System for Teaching Farm Mechanics." In this article, Mr. Roy Smith, is offering the block system of teaching as the answer for improving both the number and quality of skills taught.

His analysis of many shop programs is tonnage of projects and ounces of skills acquired.

I might also analyze a few shop programs as mountains of repetitious skills

Continued on page 307

Iowa Teachers Recommend Summer Activities

MARVIN R. HOSKEY, Student in Agricultural Education, Iowa State University
and

DUANE L. BLAKE, Teacher Education, Iowa State University



Marvin R. Hoskey

Your summer program can make you or break you! It can be wasted or used effectively — the decision is yours. If the summer program is used effectively, it can be one of the most important and fruitful phases of the vocational agriculture program. If it isn't planned and used fully, it will be the object of criticism and many questions. Far too often, people ask, "What does the Vocational Agriculture Instructor do during the summer?"

Most Vocational Agricultural Instructors do a good job during the summer. For these men their problem is finding time to do everything which should be done. Since the instructor's time is at a premium during the summer, a special problem study of the summer program of nineteen central Iowa instructors was made to determine what activities or tasks were of the most importance. These teachers were personally contacted and asked to complete a prepared questionnaire, indicating on a ten point scale the relative amount of

importance placed upon selected activities. A rating of one indicated an activity of no importance and a rating of ten indicated a very important activity. The activities and the mean values assessed are ranked as follows:

Activity	Mean Value
Supervised Farming Program—	
Day Students	9.73
Planning Next Year's Program	9.16
Public Relations Work	9.16
F.F.A. Meetings	9.00
Vacation	8.93
Contacting Potential Students	8.84
Developing Teaching Materials	8.58
Supervised Farming Program—	
Young Farmers	8.50
Supervised Farming Program—	
Adults	8.25
Other F.F.A. Activities	
(Fairs, trips, & etc.)	8.00
Improving Facilities—shop	7.74
Improving Facilities—classroom	7.74
Summer Conferences	7.63
Graduate Work	7.27
Out of School Programs—	
Young Farmers	6.53
State Reports	6.53
F.F.A. Educational Tours	6.00
Out of School Programs—Adults	5.37

As can be seen the actual on-the-farm visits of day students rated highest among the summer activities. These findings are in accordance with most recommendations of vocational agriculture leaders and the state plan. However this same activity had a range of 7-10 and it was expressed by some of the instructors that on-the-farm visits for day students were not as important in the summer as were visits to the adults and young farmers during the summer. Even though the on-farm-visits of the day students were found to be very important, the activities of the adult and young farmer classes and on-farm-visits for adults and young farmers were also found to be very

important since many production problems arise during the summer. Some instructors said "It also helps to have the backing of these adults and young farmers in the summer as well as in the winter."

Program Planning High

The high mean value for planning next year's departmental program shows the realization of the importance of planning. It appears that this importance is true not only for next year's program but for planning the summer activities as well.

Although a high value was placed on Public Relations work it was the general feeling among the instructors that this was a continual activity and not one where there is actually more emphasis given at any specific time.

It was also observed that the value given to contacting potential students varied with the number of boys enrolled in the department of vocational agriculture. Generally speaking, in the larger departments there was less emphasis given to contacting potential students.

The value given to improving facilities varied greatly. The highest ratings for improving facilities were given by those with better than average facilities in their present department. Some of the instructors surveyed said time consuming jobs could be done by the custodian or by students during slack times. Several believed this was an effective way to motivate the student to bring in farm shop projects.

The instructors surveyed were asked to respond to the question: Do you prepare a regular planning form with a schedule of your activities for use during the summer months prior to doing the activities? The response resulted as follows: 52.6% yes and 47.4% no. It appears that planning cannot be overemphasized. There are several advantages to having this sort of a form completed prior to the time of doing the activity. If such a planning form is completed and in the hands of the school administrator, he will have a better understanding of the program and be able to answer school patrons better when they ask him questions concerning your summer program. It also gives the instructor a goal or plan to follow. Several of the men surveyed said the most time-consuming task in the summer was deciding what to do and where to go each day. The plan suggested by some was the use of a



On farm teaching of adult and young farmers is a high priority task during the summer months, according to Iowa teachers.

calendar. They wrote down the things which are known ahead of time such as conferences, fairs, etc., and then the remaining dates were filled with visits and other activities. Although the plan couldn't be followed exactly, they said it did give them a valuable guide to follow. They transferred this schedule to the planning form which was given to the administrator. The calendar was left open on their desk and when anyone wanted to find them they knew approximately where they were.

Teachers Differ on Office Hours

The men were also asked if they had regular office hours during the summer. A total of 57.8 per cent

replied no, and 42.2 per cent said yes. Those replying with a "no" defended it by saying if they had regular office hours the students and adults wouldn't need them during these hours anyway. Those saying "yes" said they had to spend some time in the office so they might just as well spend it at a certain time every week. It was suggested that every morning from eight to nine would be a very good time for office hours. Since there is always mail to open this could be done at this time every morning, also it was noted that if this information (mail) was sorted and filed at this time it wouldn't pile up and get to be a problem later.

Office hours at a certain time every morning also give the man a place and time to start his day.

The men were asked to add any activities to the list which they felt were important. Some of these were: visiting other vocational agriculture departments, FFA officer's trips, crop and livestock surveys, livestock judging, chapter farm work and field days.

In summary, the summer program should be one of the most important phases of the total program. If it is well planned in advance, then followed to the instructor's best ability, it will be very rewarding and fruitful. □

Planning and Reporting Summer Activities

GLEN N. HOLMAN, Teacher of Vocational Agriculture, Delavan, Wisconsin



The old adage, "a man without plans is like a clock without hands" should be the golden rule by which all vocational agriculture instructors should live in making the summer months count. The summer accomplishments of the vocational agriculture instructor will be determined largely by his vision of his job. In other words, if the teacher can *see* and *plan* for all the jobs he must accomplish during the summer, his work will be more effective.

There is no doubt that unless a definite and well-conceived plan for the summer is set up in writing, the summer activities of the vocational agriculture instructor will be disorganized and many hours of wasted effort will result. The first principle of good organization is setting up definite objectives. The summer program of work should include a written statement of the teacher's objectives or goals and a detailed list of his daily, weekly and monthly activities in order to carry out these goals.

Throughout the school year instructors should make a note of things they expect to do next summer to improve the physical facilities of their department and to serve the needs of the entire community. Many items may be overlooked or forgotten

and in September the teacher will find himself confronted with the same deficiencies largely because he failed to include them in a written summer plan of work.

The question may be asked, "Why is planning so important?" The answer lies in the fact that there are no more than seventy-five working days during the summer to allocate to all activities. We must then answer these questions in our planning: (1) What to do? (2) When to do it? and (3) Where to do it?

Ten Key Activities

In answer to the first question of "what to do", an effective instructor

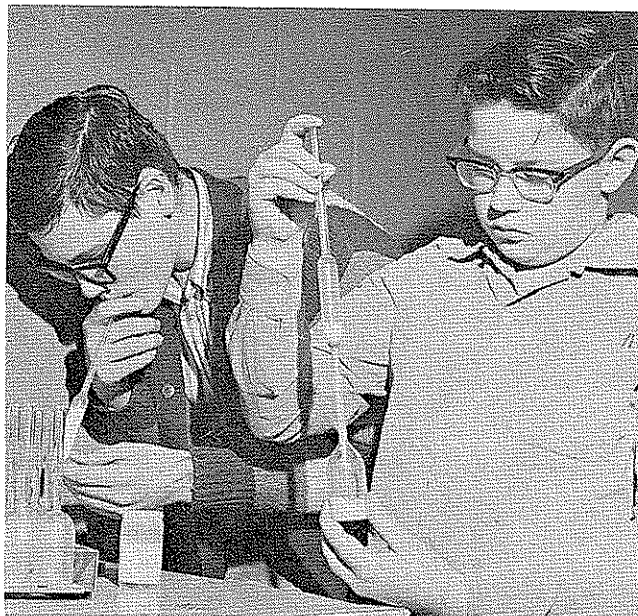
of vocational agriculture will give careful consideration to the following activities:

1. Supervising the farming program and work experience of each student.
2. Follow-up of young and adult farmer instruction and supervision.
3. Contact and visit all prospective students of agriculture.
4. Prepare an annual program of work and a teaching program for each class.
5. Hold regular FFA Chapter meetings and coordinate the state FFA Convention, fair activities, demonstration teams, and educational trips within the FFA program of work.
6. Activities for professional improvement.

7. Spend one hour each day at a definite time in the office at which time reference materials, records, reports, publicity and correspondence may be given attention.

8. Time for engaging in community activities.

9. Improve the physical facilities, shop, testing laboratory and classroom.



A strong dairy herd testing program requires planning and scheduling of time, by the instructor during the summer months.

WISCONSIN SUMMER PROGRAM OF WORK IN VOCATIONAL AGRICULTURE

Activity	(1) Plan of Procedure	Number of days	
		(2) Planned	(3) Used
A. 1. Supervision of farming programs and meetings of			
a. Day pupils	One visit per month	24	25
b. Young farmers	Two visits per young farmer in 3 months	6	5
c. Adult farmers	One visit per farmer during the summer	8	9
2. Visiting prospective pupils			
	One visit per student during the summer	3	2
B. 1. Departmental work			
a. Classroom and shop improvement	One day per month during the summer	3	3
b. Inventoring	Completed before the end of school term	None	None
c. Instructional materials			
(1) Ordering	Completed before the end of school term	None	None
(2) Collecting	During farm visits	See A-1	See A-1
(3) Preparation	During evenings-home	9 evenings	10 evenings
d. Course of study (revision)	Completed before end of school term	None	None
e. Records and reports	Mileage, farm visitation, financial, student records	5 evenings	5 evenings
C. FFA Leadership Activities Participation in			
a. Meetings	3 meetings during the summer	3 evenings	3 evenings
b. Conventions	5 days State FFA & DHIA Convention	5 days	5 days
c. Fairs	Exhibit County & State Fair	7 days	6 days
d. Tours	Grain Exchange — Chicago	1 day	1 day
e. Camps	None	None	None
f. Exhibits	Educational Exhibit County fair	1/2 day	1/2 day

10. Time for vacation or summer school.

Not all these points should be considered by each instructor of vocational agriculture because he should first consider the needs of his individual department and community. A well-planned program, however, will serve as a check on the total program and will reveal points that need to be strengthened in order to make the summer count. Furthermore, the instructor is in a better position to determine the different groups of people he must work with and make more efficient use of time and travel. The instructor should check monthly to see what progress is being made. This will reveal any weakness in the summer program and enable him to make timely corrections.

Deciding When

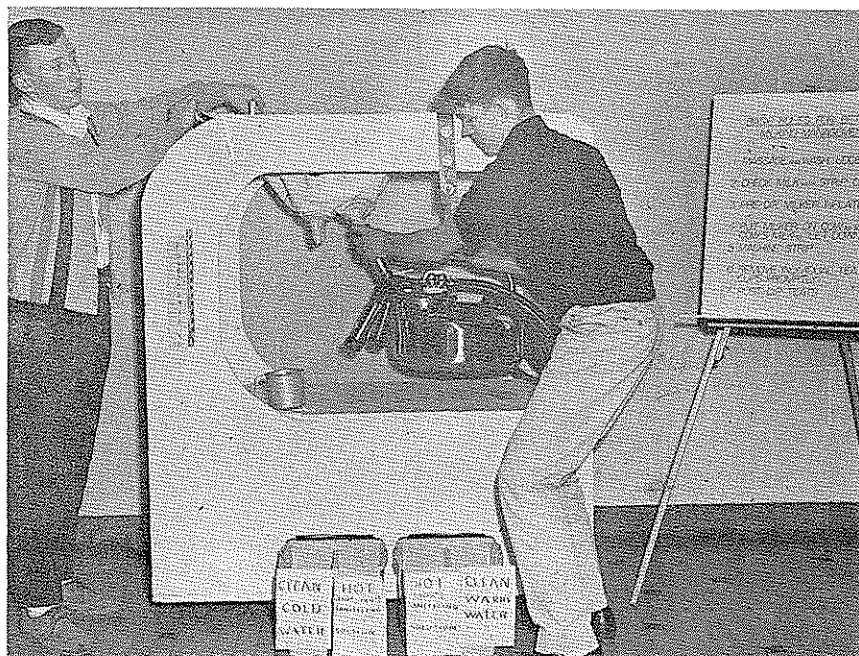
In answer to the question of "when to do it", it is expedient that the instructor construct a time allotment calendar for the three summer months. It is also at this time that the question "where to do it", is brought into consideration. He should first put on the calendar his known commitments for the summer such as: dates of summer conference, FFA Convention, educational trips, local and state fairs, field days, workshops, summer school and vacation.

Next on the calendar should be his visitation schedule. This is planned by taking the following factors into consideration: (1) The best time of day; (2) Arranging a travel schedule that will eliminate overlapping; (3) Giving more time to the inefficient farmer and avoiding the tendency to devote too much time to the more efficient farmer; and (4) Allowing time for calling back when the need arises.

The calendar may be completed by leaving open time for unscheduled events — farm calls, departmental records and program of work.

Wisconsin Report Form

In Wisconsin a form was developed by the State Supervisors of Agriculture which is used by every instructor teaching vocational agriculture. A copy of the planned activities is sent to the State Supervisor of Agriculture, one copy is given to the local Superintendent of Schools, and one is kept in the agriculture instructor's personal files. At the end of the summer, a second copy is sent to each of the above individuals, indicating the actual use of time. A sample of the first half of this form is shown on



Demonstration and fair activities should be included in the summer calendar of Agricultural Education Activities.

the conclusion of this article to illustrate one method of planning which aids in making your summer count. A calendar of each summer month with duplicate copies can be used to advantage with this form in filling in the number of days planned and days used.

It is very important that all these

activities be carefully weighed and selected so the most meaningful ones are scheduled in the time available. Many instructors work exceedingly hard during the summer, but have little to show for it since the activities were not carefully selected. What happens during the summer months has much to do with the degree of

success of your program in the remaining nine months. Why don't you start today to evaluate your summer activities to make them more purposeful and meaningful? A well organized and planned summer program can and will strengthen your department in the eyes of your community. □

Summer Assistance for Adult Farmers

SAMUEL M. CURTIS,

Graduate Assistant,

The Pennsylvania State University



Samuel M. Curtis

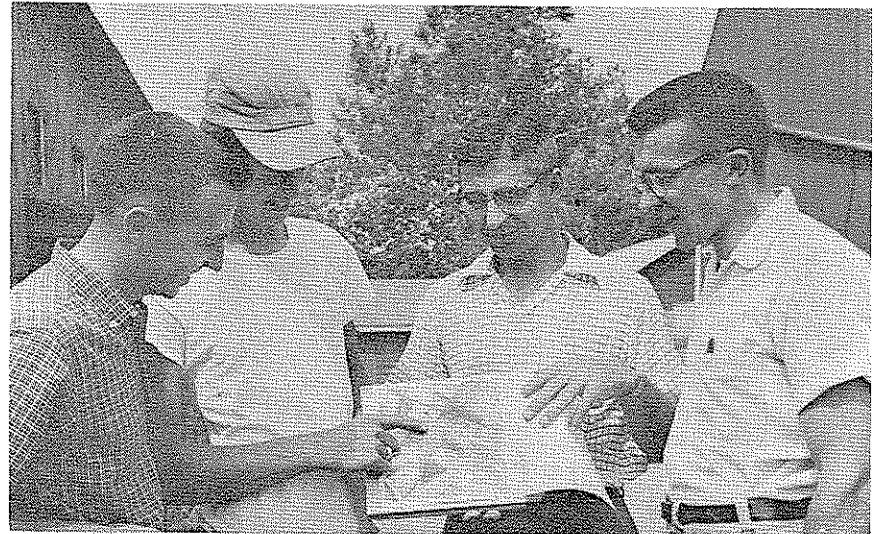
There is no more important phase of Vocational Agriculture teaching than on-farm instruction. The teacher of Vocational Agriculture comes face to face with the real instructional needs

of the student, whether he be a boy or an adult, on the farm.

In order to meet this specific task, the teacher must make a careful analysis of the farm situation of each man in his instructional program. Analysis of the situation must be followed with careful planning to prevent the teaching done on the farm becoming superficial.

It is the teacher's responsibility to know each man's farm business intimately. This is a big order; until the Agriculture Teacher establishes confidence, it may be impossible. However, there are some techniques that can aid the instructor. Here are some ideas that I have used successfully.

- *Help the farmer establish or improve his record-keeping system. This may include:*



Teachers of agriculture at Cumberland Valley High School examine a soils map with two of their young farmers. Left to right, two young farmers, Elmer Sealover, teacher, and Wilmer Harris, teacher.

- instruction in establishing a filing system.
- instruction in record-keeping procedure.
- instruction in record summarization.
- instruction in farm business analysis.

Frequently the farmer requests aid in preparing his income tax forms. The Agriculture Teacher can often initiate individual instruction in record-keeping and business analysis via the income tax route. Unless the instructor does develop a record-keeping and business analysis instructional program from the income tax contact, further aid in income tax filing is not justified. More on record-keeping analysis later.

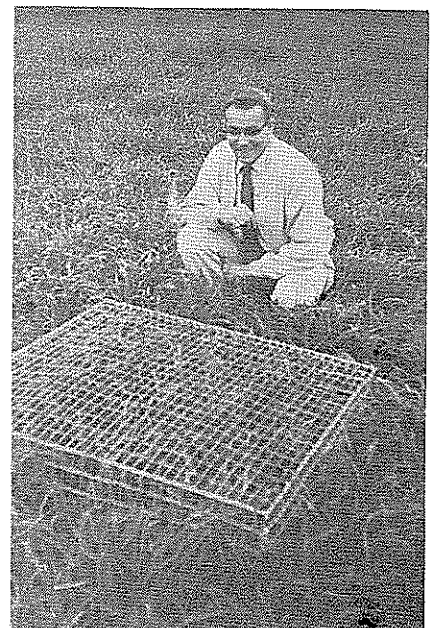
- *Help the farmer become acquainted with his soil resources.*

As he learns, you also learn.

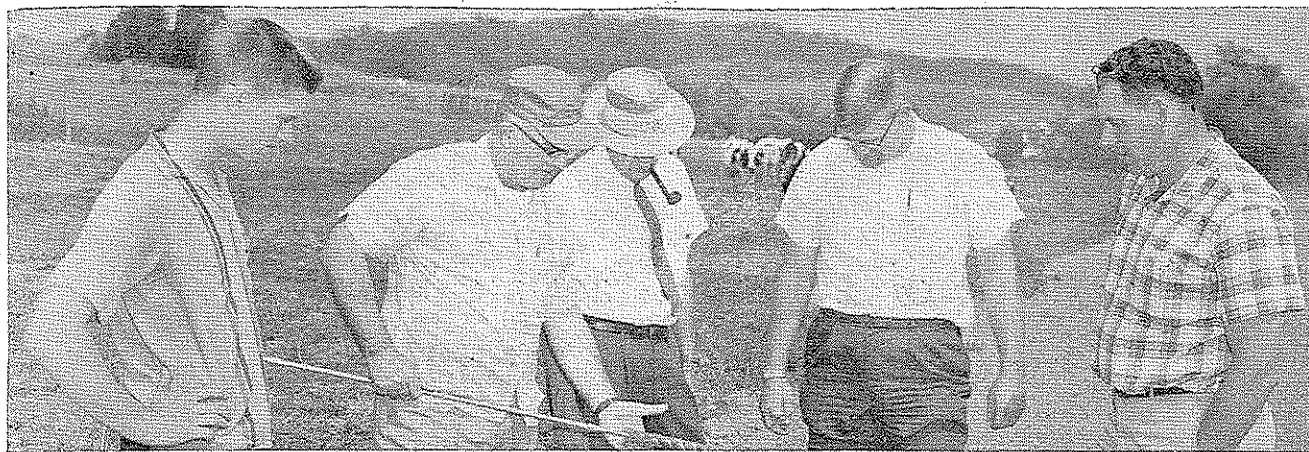
- Encourage the farmer to obtain a soils map of his farm. When he obtains it, provide instruction in soil map reading and interpretation.

- Instruct the farmer in the use of field fertility records.

Frequently, the farmer requests soil and crop recommendations. If you can help him work out these recommendations on the basis of his soil resources, you have provided meaningful instruction.



Robert Hockenbrock, formerly teacher at Middleburg Joint High School, now teaching at East Juniata Joint High School, poses with a pasture cage used in the Young Farmer pasture research study.



The teacher of agriculture employs the aid of the soil conservation technician to help a young farmer study his soil resources. Left to Right, Byron Hassinger, vo-ag. student; Clayton Best, SCS; Jim Wise, SCS; Sam Curtis, teacher; and Harold Hassinger, farmer.

- *Study the farmer as a man.* Much of this is done intuitively. These suggestions may aid the process.
 - Help the farm family establish goals: (1) farm income and production goals, (2) family goals and aspirations.
 - Help the farm family establish plans to obtain these goals.

While you are learning about the man and his business, you will also have been conducting an instructional program. This is very important because the farmer comes to expect instruction when he schedules an appointment with the Vocational Agriculture teacher.

Careful planning is the second important ingredient of successful on-farm instruction. There are several facets of this point I would like to discuss.

- *Plan as much of the on-farm instruction as possible around classroom instruction.* This is a two-faced coin. The astute Vo-Ag teacher will plan the classroom study from the information gleaned from on-farm instruction.

- *As a teacher, plan to conduct research that involves the farmers.* Teachers can do meaningful research as a part of the instructional program. For example, last year I conducted a study of internal parasites of dairy calves with the young farmers. We discovered that over half of the calves studied had worms. From this small research project, the farmers

became interested in the whole area of dairy calf management. Because of their interest and participation in the research project, on-farm instruction in dairy calf feeding, sanitation, and other phases of calf management was done in depth. Other similar projects used for instruction have been pasture management, corn production and dairy cattle feeding. Local participation helps the Vo-Ag teacher maintain a high level of on-farm instruction. If the Agriculture teacher can plan programs of research around everyday farm problems, he will find that on-farm instruction becomes more meaningful.

- *Plan to involve the young and adult farmers in new ideas and programs.* I am certain that those teachers and young farm-

ers who have worked together in cooperation with Penn State to develop an electronic farm accounting system for this state have received a large measure of instructional benefit. In my travels over the state this year, as a graduate assistant helping teachers with the electronic farm accounting pilot project, I have found teachers and farmers examining the farm business carefully. Both the teacher and the farmer are learning the meaning of farm business analysis. Under the teacher's guidance, farm records are being designed to serve a useful purpose in business analysis.

- *As a teacher, plan to keep up to date.* Utilize the resources of your community. Agriculture teachers in neighboring com-



The author demonstrates the procedure for an internal parasite analysis of livestock to an agricultural teachers' workshop. Left to right, Carl Everitt, Harry Ernest, William Williams, Sam Curtis, Paul Bahner, David Bailey, Lamar Love, Kenneth Zeiber, Russell Weller, LeRoy Hibbs, and Dr. Glenn Stevens.

munities can often be the specialist needed for a particular problem. The Agriculture teacher can never conclude his own learning experience. As he develops his knowledge and skills,

he should apply this new knowledge to instruction on the farm. In conclusion, let me say that the key to successful on-farm instruction is the planned, whole-farm approach. The teacher who knows the farm and

the farmer must carefully plan his instruction for that farm. As the teacher involves each young farmer in this type of instructional program, he will find that his on-farm instruction has purpose and meaning. □

The Value of Taking Graduate Work During The Summer Months

GEORGE W. WIEGERS, JR., Teacher Education, University of Tennessee



Dr. Robert C. Calkins, president of the Brookings Institute, has said, "No branch of higher education is more neglected today than the re-education of the educated . . . No one in these times can go far on the intellectual capital he acquires in his youth. Unless he keeps his knowledge or skill up to date, revises it, adds to it, enriches it with experience, and supplements it with new ideas . . . he is soon handicapped for the duties of the day."

Unfortunately, too many persons occupying administrative, supervisory and teaching positions in agricultural education and vocational agriculture have placed low priority on advancing themselves professionally and technically through graduate work. The day has passed when agricultural education people can be exempted from responsibility for advanced learning.

Most B.S. graduates of yesteryear need not fear loss of prestige or status by enrolling in graduate courses during the summer months with younger men who recently have finished their baccalaureate degree. It is likely that the older teacher's background and experience will more than compensate for any loss of ability to learn because of age.

Each professional worker in vocational agriculture should strive for nothing less than a Master's degree designed to prepare himself to meet his responsibilities with competence and dignity. Meeting the requirements for such an advanced degree is evidence that the recipient has demonstrated certain abilities essential for success as a competent professional leader and teacher.

It is true that the person who does not want to make the sacrifices and to put forth the necessary effort to do graduate work can enumerate a

list of reasons why he cannot leave the community or cannot afford to return to school. Some reasons are valid for some persons, many are not. Dr. G. S. Guiler stated in his article relating to graduate programs that in Ohio, in most cases, the local program did not suffer, but actually gained from the teacher's additional training received from the five-weeks summer term taken in alternate years.¹ Unless some satisfactory program can be developed to keep local vocational agriculture programs adequately staffed during the school year, it is almost impossible for teachers take leave of absence to do fulltime graduate work during the academic year. Many teachers do, however, complete some of their graduate requirements during the academic year by enrolling in selected on-campus and off-campus courses. Because of the foregoing situations, and regulations of colleges and universities, most teachers will find the best plan will include summer work for completing most of their Master's degree requirements.

A survey of teachers who have been attending summer school both on and off campus would likely indicate that some of them were attending to fulfill the requirements for an advanced degree. Others would be attending to meet certification or other state and local requirements. A few would indicate that they were attending because they had been awarded a scholarship or fellowship. A small number would reveal that they were there to gain personal satisfaction and growth because they had already earned a graduate degree. Regardless of the underlying motiva-

tions, all professional workers in vocational agriculture must continue to advance themselves, and the training institutions must also meet the challenge by providing most of the graduate work needed both on the campus and in the field during the summer months.

Many teachers of vocational agriculture and graduating seniors in agricultural education are already giving serious thought to the question of whether to attend school or do something else this summer. There is no stock answer for all those persons who are searching for the best possible answer. Possibly one question each will consider is "Will the summer graduate work be worth the time, money and effort?" In answering this question one would certainly want to identify and weigh the values that can accrue to him from the concentrated set of experiences.

What Values Can Accrue?

Because people with different needs and motivations plan to enroll in graduate summer work, it would be futile to try to give priority to the many values that may be gained. A few of the benefits which this observer has witnessed are mentioned to help the potential graduate student reach his decision.

Help Him Gradually Earn

An Advanced Degree

The teacher who attends summer school comes close to having his cake and eating it, too. He is able to hold his job, maintain his home in the local community and learn at the same time. In other words, continuity and tenure on the job are not interrupted while he attends summer classes. Usually there is no serious interruption of living conditions. It is not uncommon for the wife to accompany her husband to the campus for a few weeks during the summer.

¹G. S. Guiler, "Start the 'Count Down' for Your Graduate Program," *The Agricultural Education Magazine*, Vol. 25, May 1963, pp. 233-234.

In some cases, the wife can also pursue graduate study. On many campuses there are opportunities for family participation in intellectual, social and recreational activities.

We are living in an age when the common practice is to distribute costs over longer and longer periods. The teacher who earns much of his credit during summer sessions spreads the cost over several years. Also, frequently it is cheaper to earn the degree through the summer route than to do full-time study during an academic year.

Summer school also provides opportunities for the teacher who for various reasons is not quite ready to tackle a whole year. The summer experience may help the teacher to make up his mind whether or not he wants to earn his degree in that institution.

Help Him Understand and Teach New, Updated Materials

It is evident that the vocational agriculture teacher has been thrust into an environment of constant and rapid change. He is facing an ever-increasing volume of new technical information, and must use improved communications and methods of teaching. A twenty-year-old B.S. degree and a set of experiences repeated annually for the past twenty years does not equip the professional worker with the competence required to fulfill educational leadership roles in agricultural education. As the professional worker develops more competence he can be expected to drop some out-of-date practices and some of his pet projects. He will shift emphasis from the service aspects of his job to greater understanding and participation in professional affairs to the over-all advantage of his students.

Help Him Gain Personal Satisfaction From Challenges and Experiences

The individual who attends summer school primarily for intrinsic values probably gains more from his experiences than those who work for extrinsic values such as an advanced degree and an increase in salary. Fortunately, there are many teachers who gain satisfaction from both sets of values.

A teacher who attends summer school over a relatively long period of time has a longer time to think things over. He is more likely to develop continued self-study habits which are a must for a live teacher today. The extended time will permit

the teacher to try out or apply the new ideas which strike his interest.

Sometimes the teacher acts as if he himself never had been a student. He has forgotten how hard the seats were, how to react politely to uninteresting classes and the like. Going back to summer school causes the teacher to refresh his memory and to take a new look at himself. Summer school experiences should help him to become more tolerant and to extend the "listener's" point of view over a longer period. All these results will bring satisfaction to the "new" teacher—"new" as measured by the newness of his outlook.

Help Him to Make Valuable Contacts That Would Not Be Possible in the Local Community

Summer school experiences make it possible for the teacher to share his problems, ideas and solutions with specialists, fellow teachers and others.

Sometimes outstanding supervisors and teachers cross state lines to pursue study in more than one institution. New ideas have spread from one state to another through contacts at summer school workshops or formal courses. National and regional centers have helped to make it possible for teachers to make valuable contacts, and to earn credit at the same time.

Help Him Actually To Get Some Planning and Work Done That Are Needed at Home in the Local Vo-Ag Program

Opportunities are provided for enrollees to work on genuine problems related to home working conditions in many summer school courses and workshops. Such situations help to keep theory and practice together in a mutually supporting manner. Some examples of what teachers have done to "kill two birds with one stone" have been to develop guidelines for programs of work for the total program and the FFA program, courses of study, adult education programs and many other programs, both large and small.

There are other values that can accrue which may be just as important and even more important to a particular individual than those already discussed. Other values might include ability to solve problems with new research tools, qualifying for a better position; more prestige for the teacher; and uplifting the image of vocational agriculture teaching in the community, state and nation. □

Letters

Continued from page 300

without a bump of practical application and the practical application is an important motivator.

I agree with Smith that his Block System can improve farm mechanics instruction. Is it, however, the block system that has brought about the improvement or has it been his recognition of the fact that teaching farm mechanics requires careful planning? The subject matter must be organized, skills defined, proper facilities secured, adequate tools provided, and properly managed for an effective educational environment.

Farm mechanics instruction with approved projects can be successful if there has been adequate planning. This method does require larger shop facilities, a better selection of tools, and fewer students generally. The teacher must plan ahead and promote the projects that are needed for the instructional period.

Regardless of the system—the first sign of success is when the teacher recognizes the fact that teaching farm mechanics requires as much or more ability and planning than when teaching other subject matter areas.

When you feel your program is slipping, try the Smith System!

Sincerely,
FORREST BEAR
Dept. of Agricultural Engineering
University of Minnesota

Sir:

The guest editorial "A Master Plan Can Aid Supervisors", by Marvin G. Linson, State Supervisor of Agricultural Education for the state of Colorado, was apt and provocative.

We, in Georgia, believe supervisors have important administrative responsibilities. They are in positions to assume important leadership roles, but they alone should not determine program objectives. We believe program development is a two-way street beginning at the local level with school officials, teachers, lay people, advisory committees, and others; and continuing on a state level with members of the administrative staff and individuals in leadership roles involving state advisory committees in planning total state programs in keeping with local program needs.

We believe the involvement of people who are not considered professional educators in program planning and evaluation is essential. At the same time, we believe professional people, members of our staff, and supervisory personnel must provide the professional leadership necessary. We are delegated these responsibilities, and at all times should be willing to assume them and give the kind of leadership needed in continually planning, implementing, and evaluating programs to meet the changing needs. These opinions represent both my own and those of Mr. J. G. Bryant, State Supervisor of Agricultural Education in Georgia.

Jack P. Nix
State Director
Vocational Education, Georgia

In-Service Education — An Important Summer Activity

OTTO LEGG, Teacher Education, The University of Tennessee



Pity the poor sheep who has lost its way. If the lambs are lost, what a terrible cost some sheep will have to pay!¹ Agricultural educators ill prepared to cope with the "rate of change" need not expect guidance in selecting in-service offerings. Recognizing that a problem exists is just now beginning to enter the range of perception of too many educators.

"Teaching personnel almost always includes a number of teachers who do not see that they need professional improvement of any kind. It very often happens that such teachers are the very people who do need such improvement and perhaps need it to a greater degree than do others."²

A small problem or two could be handled without coordinated effort. However, we have instead a multiplicity of imposing needs. Some are basic to educational advancement. Others are derived from changing circumstances. All cannot be recognized or intelligently discussed in one paper.

Different background experiences, different amounts of education, and differing lengths of service form the basis upon which goals for in-service education have been based. Earlier issues of *The Agricultural Education Magazine* indicate many kinds of activities grouped under in-service education. In-service education has covered all degrees of formality and all kinds of subject matter.

Goals, status, types of in-service, leadership roles and curriculum determination will be discussed as I believe they influence in-service education.

Educators who work in vocational agriculture must be convinced that education is a continuous process. During a Southern Regional Conference sometime ago someone said, "The student has the right to drink from a running stream and not from a stagnant pool." Unfortunately, not all people are motivated in the same way, to the same extent, or for the

¹C. D. Miller, "The Lost Sheep."

²Jesse A. Taft, "Growing Professionally," *Agricultural Education Magazine*, February 1959.

same reasons. Teacher educators and supervisory personnel need to join together to provide a more satisfactory design for in-service education. An analysis of the employment spectrum should influence curriculum change. This responsibility for the quality of in-service education rests with those who design and control the funds for implementing the in-service curriculum. In-service offerings of all types continue largely on a judgmental or consensual basis with little progress in altering traditional procedures.

Four Types of In-Service Education

Generally, in service education may be included under four types of programs — orientation, skill training, formal graduate education, and leadership and development. Which is most important? What phase now? What phase later? How much time can be allotted? All decisions need to be goal directed. The problem is determination of the right goals.

The Review of Educational Research, which cites most of the significant happenings in education, reports in the October 1963 issue little activity in in-service education. Reynard states, "Tremendous impetus for in-service education has been supplied by institutes in subject matter fields. Support for both summer and year-round institutes in mathematics, science, languages, and guidance provided by the National Defense Education Act, NSF, and various foundations has provided greatly increased resources for in-service programs of public schools or concerning cooperative efforts between teacher education institutions and public schools for the development of such programs." From what is known about NDEA, NSF and Foundation supported programs, the in-service programs are for college credit. They are also financially and administratively supported.

In another statement, Reynard continued, "Designing workshops and institutes to serve best the continuing educational needs of teachers in the field confronts both public schools

and teacher education institutions."

The type of in-service education in which vocational agriculture teachers are accustomed to participate has been both credit and noncredit. Much of this effort has gone unrecognized by local school administrators, not included as part of the regular work load, and often conducted by agencies without organic connection to the educational program or system.

In some states the difference is apparent in educational opportunity for Extension Service workers as compared to vocational agriculture teachers. Apparently, there has been a greater sensitivity to the value of education by the Agricultural Extension Service and the determination of Extension Service administrators to rely on systematic in-service education to make a significant difference in that program. In comparison, there is little evidence that any great inroads have been made on the problem of systematic in-service education for all vocational agriculture teachers.

One of the main outcomes of in-service education is maintenance of status in the professional and subject matter areas. Peer ratings, though talked of most in relation to children, operate most effectively in estimating the position of a group in the hierarchy of this society. The status of vocational educators, whether supervisors, teacher educators or teachers, is rated on how well each individual or group compares to co-workers in the same state capitols, universities and high schools.

A planned program of *orientation* is to give the new teacher an understanding of the what, where, and with whom he is to perform the job. Included are the conditions under which the work is to be done and the setting in which it is to be done.

This part of in-service education has often consisted of occasional visits to the schools where the new teacher is working by a staff member of agricultural education and/or by the state or district supervisor. Part of this in-service function might well be carried out during the sum-

mer months.

The Skill Training Program

Rapid change and the vast increase of new knowledge furnish a clear basis for continuing the *skill training program*. Certainly much good has come to teachers and has been passed on to their students via noncredit in-service skill education. Teachers working alone much of the time have the opportunity through in-service education to update both their information and relationships. Where to obtain additional education, who should promote skill in-service training, and the amount of time to devote to it all need a more critical analysis. Events in which teachers can take part are limited by time and pressure of other activities regardless of the quality of the offering or the logic for participating.

Agricultural educators based at the universities acknowledge the increasing need for in-service education. However, they are often denied a way of presenting in-service noncredit education. In some states there is no way for them to receive credit on a work load for such service. Vocational agriculture teachers, with a limit on time to allocate to all activities, often consider more important the credit received toward a graduate degree or credit which will contribute toward a salary increase.

Many invitations for in-service noncredit training are made directly to the participants. Without the knowledge and support of the school administrators, little or no recognition can be given by them.

Individuals and businesses occasionally promote noncredit in-service education in order to sell or influence the sale of products. Should agriculture service or supply companies hold in-service educational programs for vocational agriculture teachers? Is the primary purpose to inform? This may be true, but promotion of a product may be the primary motive, or at least a close second. This is not to infer that all such influence is necessarily evil or to be avoided. However, since we may be living in the beginning of the psychological age, teachers should at least recognize **MOTIVATIONAL RESEARCH TECHNIQUES** and not act as *quasi* public employees for anyone.

Teachers work closely with a great number of products. Will the teacher endorse products? Will he teach about makes and models or will it be terminology and principles? The

difference must be recognized. Vocational agriculture teachers have received free, multiple copies of books from the salesman or company. For the most part, this has been considered a boon in the absence of sufficient funds to purchase needed educational materials. Teachers can resist becoming influenced peddlers and still receive expert instruction valuable to them in teaching.

I believe they can recognize that pressure may be present; be able to absorb it without undue transfer of influence to their students.

Many in-service skill presentations violate the basic psychological principle of active involvement. Active involvement assures personal satisfaction if not graduate credit. Often noncredit in-service education has been poorly organized, poorly attended, and without a means for measuring the degree of individual participation. Bail and Clark³ reported on their eight-year study of in-service education that one-half of the teachers attended less than 50 percent of the meetings. This is not unusual. What is most important is which half attended, and what of the high school students who studied under the teacher who did not seek improvement.

Occasionally noncommercial agencies, without organic or administrative connection to vocational agriculture, wish to inflate the number of people they have reached. Vocational agriculture teachers have responded regularly to special days, giving evidence of their willingness to cooperate. Advantage should be taken of worthwhile programs. However, the requests need to be made through and accepted through the regular school administrative channels, since most administrative units are now on a twelve months' basis.

A third form of in-service education is that taken for *graduate credit*. This type of in-service education is clearly the responsibility of the universities. Credit received from in-service education furnishes the primary motivation to vocational agriculture teachers for continuing their education since salary increments are attached.

Leadership and Development

The fourth area of in-service education, which is usually noncredit, may be called *leadership and development*. Leadership and development can aid in keeping state and regional

³Joe Bail and Raymond Clark, *Agricultural Education Magazine*, February 1956.

groups up to date. For various reasons, not all states have such leadership and development programs. This group is usually made up of a nucleus of interested, experienced and able teachers who study curriculum change, work on subject matter, and advise with state supervisors and teacher educators on mutual problems.

In view of the assumptions made at the beginning, the four areas of in-service education should be scrutinized critically for present practices. Do vocational agriculture teachers, supervisors and teacher educators consider noncredit in-service education important? I would submit the proposition that if these activities are worthwhile they should receive state and local administrative recognition and support. In-service noncredit education should be counted as part of the regular work load, be scheduled and supported financially. Now is the time to accomplish this. Facets of in-service education (orientation, skill training, formal graduate work, and leadership and development) which do not measure up should be abandoned in favor of those which do. Teachers need help in determining a day's work. Too many good teachers end a work day feeling guilty because something was left undone. Yet, teachers are admonished to add a unit of instruction in "Related Occupations," a field trip, or a contest to their schedule. Who then will help them identify and eliminate the less important units from their curriculum? High school and adult students are to be the recipients of quality education, therefore, what is educationally desirable must be made administratively possible. □

From Former Issues

Writing in the July 1933 issue Car-se Hammonds said, "It would be so comforting to many teachers if time and agricultural education would but stand still. This boon is impossible. It would make vocational agriculture a fixed, changeless, static, dead thing instead of the changing, evolving, dynamic, living thing that it is. We must press adventurously forward. We must move along with the stream of evolving society. We do not wish for society to stand still; we must not yearn for the restful finalities of yesterday. Education today is vigorous because society is passing thru tremendous changes. We would not have it otherwise."

Both Sides

More Content and Structure

in the Curriculum is Inevitable

HAROLD R. CUSHMAN, Teacher Education, Cornell University



Harold R. Cushman

In the past the teacher of agriculture has for the most part been expected to plan a course of study in agriculture which was tailor-made to meet the needs of prospective farmers in his own local community. And although teacher trainers and supervisors may have supplied lists of suggested units of instruction for his consideration, the teacher has been encouraged in his efforts toward uniqueness and structuring on the basis of local data. This concept, so widely accepted for so long, has been based on several assumptions, prominent among which were: (1) that most of the students would become farmers in the local community where they attended high school, (2) that the teacher was in the best position, with the help of local farmers on the agricultural advisory council, to decide what competencies were most needed for farming in the local community, (3) that although farming was changing rapidly the teacher and the advisory council were the best judges of whether or not innovations in farming methods should be reflected in the local course of study and (4) that the course of study should be tempered by the opportunities for supervised farming programs on home or co-operating farms.

As the purpose of vocational agriculture shifts from preparation for farming to preparation for the wide spectrum of agricultural occupations, I believe that it is inevitable that the curriculum in high school agriculture will become increasingly structured by outsiders and more content-oriented than has been true in the past.

My reasons for this belief are:

Our population is becoming increasingly mobile, not only within a given state, but also between states.

As we train for a variety of agricultural occupations, the mobility of our clientele will increase and thus decrease the validity of local community data as a basis for curriculum planning.

As anyone knows who is engaged in studying the so-called off-farm agricultural occupations, the task of inventorying the demands of the numerous job titles and occupational families requires careful, time-consuming work. Duplication of this type of effort by individual teachers would not only be inefficient but nearly impossible because of the size of the "new community" in which our students will work. For this reason, it is likely that this sort of effort will be made increasingly by specialists who will make their results available to teachers within states and regions.

Most of the agricultural occupations are dynamic and changing. The teacher may no longer be the best person to decide when innovations should be picked up by the curriculum and if he does make such decisions the danger of obsolescence may increase because of the teachers' lack of contact with many of the sources of employment.

Less instructional time may be available for agriculture at the high school level. In the day of the double-period perhaps we could afford more inefficiency than will be true in the future. The competition for student time will result in more content emphasis and more careful structuring of the curriculum.

It is likely that agriculture will be forced to shift from a single track program in local schools to a multiple track program in some type of area school organization in order to meet the divergent needs of the many occupations requiring agricultural competencies. Meeting the needs of the several occupational families will again cause us to be more selective in content.

For these five reasons, I believe that increased structuring from out-

side the school district and more subject matter emphasis will, increasingly, be inevitable features of the agriculture curriculum in the years ahead. □

CLARENCE B. DAVENPORT — former Vo-Ag teacher of Mount Holly, New Jersey received an award for distinguished service to agriculture from the New Jersey State Board of Agriculture in January.



Clarence B. Davenport

Davenport was honored for a lifetime career of service to rural youth. He taught vocational agriculture at Mount Holly High School from 1921 until 1959. He organized the Mount Holly Future Farmers of America Chapter in 1929 and continued as adviser until his retirement. For many years he was vocational agriculture editor of *County Agent and Vo-Ag Teacher*. Davenport was instrumental in organizing the Burlington County Farm Fair, of which he is manager and treasurer. Following World War II, he headed an institutional-on-farm training program at Mount Holly for returning veterans, one of the largest such Veterans Administration projects in the country. □

Themes for the Agricultural Education Magazine

July-December, 1965

1965
July—THE VOCATIONAL EDUCATION ACT OF 1963
August—PHILOSOPHY AND OBJECTIVES
September—THE NEW OCCUPATIONAL MIX
October—USING RESOURCES OUTSIDE AGRICULTURAL EDUCATION
November—RESEARCH
December—PLANNING LOCAL PROGRAMS

The great use of a life is to spend it for something that outlasts it.

—William James

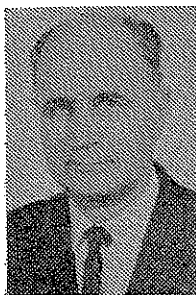
Stagnant minds are the greatest obstacles to progress.

—William D. Danforth

of the Issue

Build Curriculum on Proven Values

STANLEY S. RICHARDSON, Teacher Education, Utah State University



Stanley S. Richardson

Through the years numerous changes have evolved in agricultural education. Other desirable and perhaps even more drastic changes lie ahead. For 30 years or more those who participated in regional and national conferences or in state or AVA conventions were told at each convention that "this is probably the most critical year that vocational education has ever faced." Such a statement could be repeated again in 1965. The same high caliber men who carried the program during inflation, depression, war, and rehabilitation will accept the challenges and will carry on in the years ahead.

The success of vocational education in agriculture has been recognized by teachers, school administrators, farm organization and industrial leaders. Former class members who are now farmers, agricultural workers, mechanics, professional men, or workers in industry, readily testify to the value of their classes in vocational agriculture. The former students have become the greatest boosters of vocational agriculture.

Why Vo-Ag has Succeeded

The success of the program was not accidental. It was the result of careful planning by many educators and the dedicated service of capable teachers. Fundamentally, it was geared to the needs of individuals, the family, and community. To meet these needs supervised farming or placement for experience became a part of the instructional program. Instruction was provided over a period of years so that both breadth and depth were included. It was fitted to the age level of students. A practical program was developed in agricultural mechanics that enabled boys to do the mechanical activities that they should be able to perform with the

tools and facilities that should be available. Leadership activities motivated through the FFA, challenged boys to develop their abilities through officer and committee work assignments, public speaking, parliamentary procedure, and scholarship. Parents of students were involved and there were numerous community benefits as a result of the FFA service projects. The above necessitated close relationship of teacher, parent, students, and community members, many were involved.

The program as it has been developed is too valuable to trade for anything like the trade made in the red pottage story of Esau and Jacob as related in Genesis. We must hold fast to the real values of the present and move forward into the off-farm agricultural fields to meet the educational needs of those who plan to farm or to work in off-farm agricultural occupations and make the extension as solid as the base by building on the sound principles of vocational education in agriculture.

Teachers Must be More Than Specialists

Prospective teachers of vocational agriculture should be given a broad base in their undergraduate programs. More science and math should be included in their basic courses and less stress should be placed upon production courses. Some teacher education centers may emphasize specialization but extreme caution is needed when it is realized that in many high schools one teacher will conduct the entire program of vocational agriculture. He must be more than a specialist if he is to set up a modern program to meet the needs of high school, out of school youth and adult groups. In many states, multiple teacher departments are the exception and not the rule. It will be up to one teacher to use available specialists, cooperate with people in distributive education and trade-technical fields, to develop a practical program. Such is not new, it was carried on in some

centers more than 25 years ago.

Unless farm or other boys interested in agriculture are reached in high school, their interest in agriculture may and probably will be diverted to other channels. These boys pass this way but once. A boy who enters agriculture as a freshman or sophomore in high school often becomes such an "eager beaver" that he develops a program that challenges him to his capacity. Such a boy often earns several hundred or even a few thousand dollars while completing his supervised farming programs.

Many college students enrolled in agriculture have reported that were it not for vocational agriculture in high school, they would have entered a field other than agriculture. Several of these students have stated that they would not have completed high school except for vocational agriculture and the influence of their agriculture teacher upon their lives.

The provisions of the Vocational Education Act of 1963 bring about some of the greatest opportunities ever presented to a group of educators. The strength in the past has been due largely to that close student-teacher relationship that causes former students to rate attitude and principles above subject matter. Each university or other center in teacher education can readily set up programs which, if added to a core curriculum, can readily prepare teachers for special areas such as agri-business, landscape architecture, agricultural mechanics, greenhouse practices, horticulture, etc., if, where, and when there is a need.

Leave Specialization to Other Areas

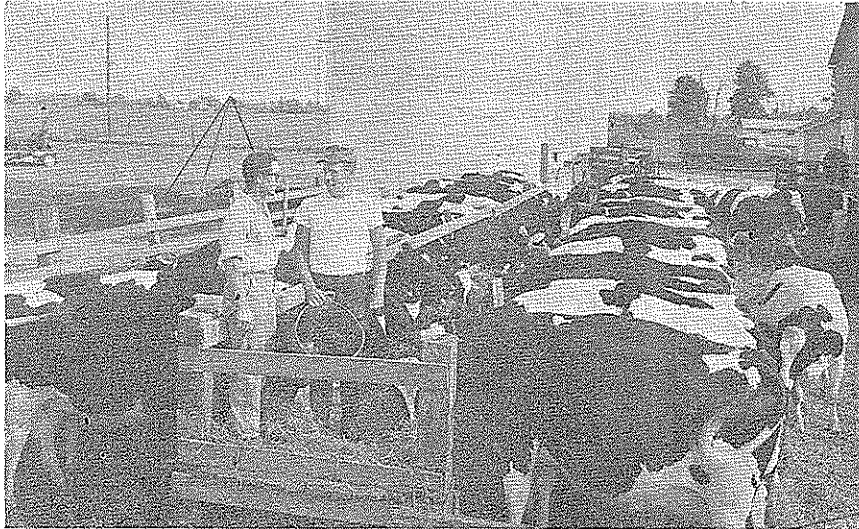
Above all, we should keep away from that mythical character in the story who tried "to ride out in all directions at the same time" and leave specialization to other agricultural areas that need it. We must keep the instruction centered around the needs and interests of high school students, young and adult farmers at the same time stressing integrity, hon-

esty, ambition, dependability, and the development of favorable attitudes above subject matter. The length and nature of classes taught in a community should be determined by the needs.

Local departments of vocational agriculture should serve as centers of modern agriculture in this modern

world. To do this teachers must cooperate with experiment stations, extension service, and others in agriculture to motivate, stimulate, and educate those students who come under their guidance. School administrators and the community will support "men of action" who in this modern age must be "men of thought" and the

program will move forward to cope with the problems of the future. □



On Farm Teaching of adults and young Farmers should start the first month on the job.

Planning For That First Summer

GILBERT S. GUILER, Teacher Education, The Ohio State University



Gilbert S. Guiler

The summer months are one-third gone when most beginning teachers are employed July 1 and the "forest of jobs" probably seems rather dense. Thus, the young teacher has a feeling that he has been given "strike one" before he is even up to bat. The fear of striking out soon builds up with this mountain of jobs to be done before school starts in September.

A Job To Do

Beginners must accept the fact that there is an important job to be done. A dangerous pitfall that they must avoid is the assumption that our success depends upon how "busy" they are on the job, because there is a difference between being on the job and doing the job. If summer employment for teachers of vocational agriculture is justified, the need must be recognized and the necessary ac-

complishments achieved.

In a study conducted by the writer¹ 320 experienced teachers of vocational agriculture identified their major areas of responsibilities during the summer months. The major purpose of this research was to evaluate the use of professional time by Ohio teachers of vocational agriculture during the summer months and implications were made for the improvement of the summer programs. A follow up of this study was conducted by the writer during the summer of 1964, when 35 *beginning teachers* were asked to record their use of professional time during July and August classified in the same manner. The distribution of professional time by 35 Ohio beginning teachers is shown in Table I.

On-Farm Instructional Visits

Perhaps the main objective of beginning teachers during the summer

¹Gilbert S. Guiler, "The Use of Professional Time During Summer Months by Teachers of Vocational Agriculture in Ohio," (unpublished Ph.D. dissertation, The Ohio State University, 1959).

extended service should be to get acquainted with the problems of their present and prospective students.

It was surprising to find beginning teachers devoting 34 percent of July and August to the responsibility of on-farm instructional visits. This was considerably a greater amount of time than experienced teachers devoted to the same area, as found in previous studies. The beginning teacher should understand that this important responsibility encompasses developing the occupational experience, initiating new farm practices, demonstrations, developing new specific skills, and follow-up of what has been taught in the classroom to high school and out of school enrollees.

Farm visits can supply valuable information necessary in preparation of the course of studies for the approaching school year. However, the young and adult farmers deserve greater attention than the three days allotted to them by the beginners.

Teachers spend relatively less time with young and adult farmers than with the other responsibilities. These areas should be considered as paramount phases of the teacher's responsibility during the summer months and receive more nearly an equal time as that devoted to the high school program.

Youth Organization

An on-going F.F.A. program of activities demands the attention of a new teacher during the summer. A monthly schedule of F.F.A. activities, such as meetings, educational tours, chapter projects, camp, and Fair activities cannot be neglected but should be planned and carried out during the summer months.

The time spent at the inevitable county and state fairs can be justified if individual student instruction prevails. However, in some cases, the teacher becomes only a spectator and too little teaching is done. Five days of the teacher's professional time, as devoted by the beginners, are hard to justify.

In-Service Education

In-service education should be accepted and recognized as an essential and integral part of teacher education. The four-year college program

TABLE 1
Distribution of Beginning Teachers' Professional Time in Days
By Areas of Responsibility During the Summer Months

	Beginning Teachers	
	July and August Work Days	Percent of Total Time
<i>On-Farm Instruction</i>		
High School Students	12	
Young Farmers	2	
Adults	1	
Total	15	34%
<i>Youth Organizations</i>		
County and State Fairs	5	
F.F.A. Activities	4	
Total	9	20%
<i>Departmental Activities</i>		
Physical Facilities	5	
Program Planning	2	
Office Routine	1	
Total	8	18%
<i>In-Service Education</i>		
Workshop-Seminars-District Meetings	4	
Professional Preparation	3	
Total	7	16%
<i>Communication</i>		
Communication and Public Relations	2	
Community and Misc. Activities	2	
Conference Off-Farm	1	
Total	5	11%
Vacation	0	0
Total Work Days—July-Aug.	44	

cannot adequately prepare prospective teachers for the profession.

The beginning teachers, as shown in Table 1, devoted an average of 7 days to in-service education and professional preparation consisting of orientation meetings, curriculum planning workshops, annual group conferences and seminars.

An important objective of all beginning teachers should be to have their total vo-ag curriculum tentatively planned before the school doors are opened in September. Each course of study, whether on a yearly basis or semester plan should be arranged for the entire year.

The Ohio in-service training for beginning teachers provides for a two-day seminar in August for the purpose of developing the total vocational agriculture curriculum. This time in "teacher preparation" and in-service training is of utmost value and cannot be completed in two days. Each teacher compiles all information gathered on forms provided. The selection of instructional areas and teaching units to meet the needs of students will require more time than devoted by the beginners in this study.

Departmental Activities

The 35 beginning teachers allowed 8 work days or 18 percent of their

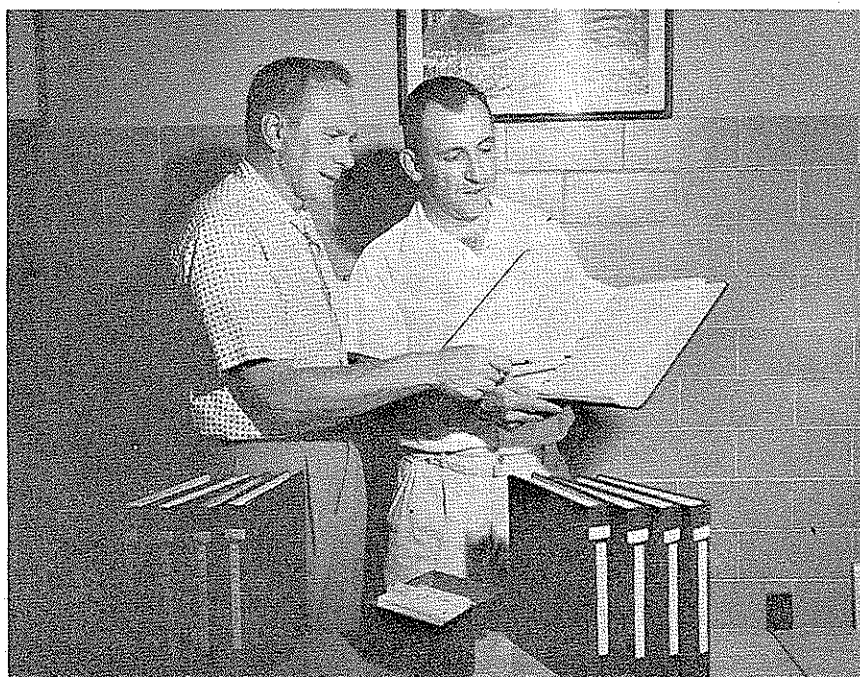
summer months to be spent in the area of Departmental Activities. Physical Facilities, Department Program Planning, and Office Routine absorbed the major portion of this large block of time.

During July and August beginning teachers often spend an excessive number of days in the classroom and

shop working on physical facilities. The filing cabinets, the tools, the equipment, paraphernalia, reference books and bulletins are all important but certainly deserve less professional time than is normally devoted to this area. Our job as educators and leaders in a rural community is not to assume what might be classified as janitorial activities. Our job is to develop understanding, appreciation, and conviction that vocational agriculture has a purpose in the community. Such activities *can* wait until school begins, while others will not.

Communication Activities

Too often in summer activities we talk to ourselves and do not involve our school administrators and the key resource people in the community. These groups must be involved in planning a program that is designed to meet the needs of the students and community. In addition, they will be helpful in evaluating progress or lack of progress that has been made. There are numerous occasions to invite the school administrators and other community personnel to witness a field demonstration, participate on a panel, attend a young farmer tour, F.F.A. meeting or a day at the county fair. These are golden opportunities to acquaint them with the vocational agriculture program. Beginning teachers of vocational agriculture must be cognizant of and use this advantage they have to secure the support needed in order to conduct an effective program. □



G. S. Guiler confers with John Sherrick, vo-ag teacher of Savannah, Ohio, on new curriculum materials.



William Drake

One teacher of agriculture recently put it this way: "When I came to this community 15 years ago there was one feed and seed store employing 2 people. There is still one store but it now employs 20 people. There were two agricultural machinery dealers with a total of 5 employees and now those two dealers employ 25 people." That same teacher mentioned a decrease in the number and an increase in the size of farms . . . 30 cow herds then . . . 80 cow herds now—and so it goes.

This teacher had apparently been doing some "pulse taking" on his agricultural community and in doing so he was germinating some realistic questions concerning the agricultural program he is responsible for. Has the vo-ag program lost its value in his community or has it just "gotten behind"? Is the program 15 years, or just a little, out of date? What does the trend in off-farm agricultural employment mean in terms of program planning? To have a purpose for being, the program he conducts must serve its community, and with modern mobility, perhaps a larger, more extensive community. When and where will he look for his answers? The summer months are a good time for program planning and perhaps this summer is his best opportunity to gather evidence for program changes. "What evidence is needed for program changes?" and "Where can it be found?" are realistic questions, as programs in vocational agriculture are examined with an eye on program planning this summer.

Studies being conducted throughout the nation reveal that agricultural communities are changing. And these changes are offering important "cues" to those who plan and conduct educational programs in agriculture. The data revealed by studies of off-farm agriculture are usually gathered in local communities and in time are reported back to local communities. State and area studies are an important and meaningful step in re-designing education in agriculture,

Community Study — Vital to Planning Emerging Programs

WILLIAM E. DRAKE, Teacher Education, Cornell University
and
DAVID G. CRAIG, Research Assistant, Cornell University



David Craig

but programs are offered in local communities and therefore much of the responsibility for changed programs will rest there.

As the teacher of agriculture looks ahead, certainly, his local community is the most fruitful source from which to gather "evidence for change". However, various factors outside his community may provide some "direction for change".

Directions for Change

Knowledgeable people today agree that "agriculture is more than farming" and agricultural educators seem to agree that "vocational education in agriculture should include more than farmer training". How then, does the teacher of agriculture, who knows farmer training, equip himself with evidence to do more than that? How can he feel secure in expanding his operation?

The 88th Congress specified in the



1. Contact employers in Agricultural Businesses and Services.



2. Determine Competencies Needed by Employees.

Vocational Act of 1963 that . . . "any amounts of money allotted . . . for agriculture may be used for vocational education in any occupation involving knowledge and skills in agricultural subjects, whether or not such occupations involve work of the farm . . ." ¹ Certainly no green light could shine brighter in the direction of change than that turned on by the Vocational Act of 1963.

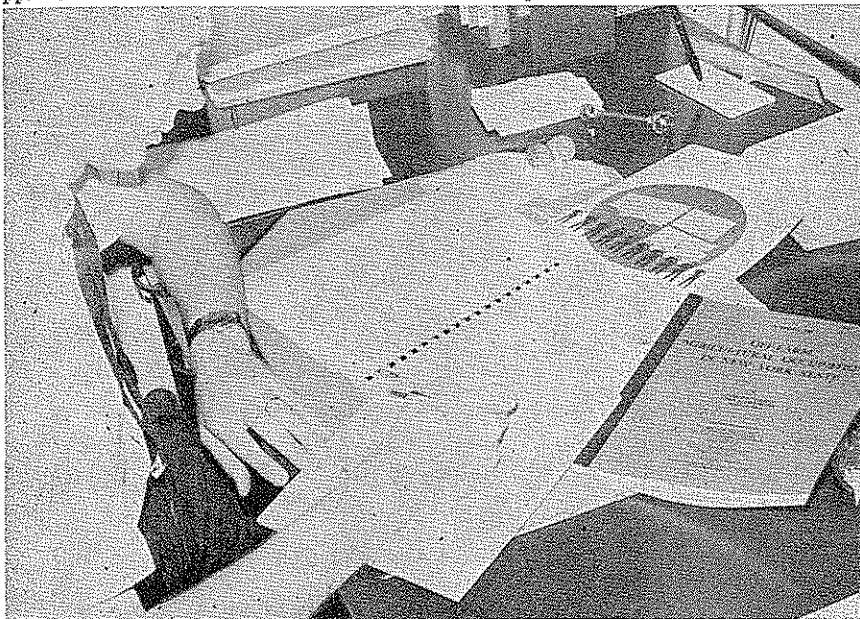
Other directions for change lie in current studies of off-farm agricultural occupations. Most states have completed or are involved in on-going studies of this nature. Preliminary findings reveal significant numbers of off-farm agricultural occupations.

¹Committee on Labor and Public Welfare, United States Senate, *Selected Education Acts of 1963*, (Washington, D.C.: U.S. Government Printing Office, 1963), pp. 75-76.

Findings also indicate that agricultural competencies are needed by workers employed in these occupations. For example, a study completed in New York in February, 1965² revealed that "a total of 213 different job titles of off-farm agricultural occupations . . . located in 541 agricultural businesses and services . . . were found in the 16 school districts surveyed". The actual number of persons employed in occupations surveyed numbered 2,310.

An attempt is currently being made by the National Center for Research

²Harold R. Cushman, Virgil E. Christensen, and Garry R. Bice, *A Study Of Off-Farm Agricultural Occupations in New York State*, (Ithaca, New York, Agricultural Education Division, Rural Education Department, New York State College of Agriculture, Cornell University), January 1965. Pp. 12-16.



3. Interpret Evidence for Change



4. Involve Others in Program Decisions.

in Agricultural Education to summarize state studies in off-farm agricultural occupations. This summary holds promise in setting the framework for nationwide program innovation and redesign.

Framework for Change

The "right kind" of educational program in agriculture must have the "right kind" of educational objectives. It must be planned and conducted within a framework of objectives which accurately reflects changes in agriculture and changes in education. As employment in agriculture changes then it follows that the objectives for education in agriculture also change. Consequently, the teacher of agriculture is faced with the question: "What should be the objectives of the program he plans and conducts in his local community?" and "What steps must be taken to carry out those objectives?". Acquiring an answer to the first question involves the careful gathering of all the facts obtainable which concern agriculture and the people working in agriculture. It involves a knowledge of trends in agriculture, agricultural workers, mobility, and routes to gainful employment. And it involves an interpretation of such facts and information in terms of the community being served by a specific program. Only after such facts and information have been gathered and interpreted can the questions of objectives and the carrying out of objectives be considered.

Changes in agricultural employment have come about as the result of many conditions such as improved technology, expanding economy and increased mobility, just to mention a few. New and revised programs in agriculture which reflect those changes will come about only by means of thoughtful, objective and careful planning. Meaningful programs in vocational agriculture for next year and the years to follow will not "just happen". They will be the result of a close examination of many factors in each community where education in agriculture is taking place.

Gathering Evidence for Change

There are many and varied approaches that might be taken by the teacher of agriculture as he sets about the task of gathering evidence to support program changes. A review of state and area studies in off-farm agricultural occupations suggests two sources of evidence which appear to

be essential in order to effect change in programs. The first is an accurate accounting of the present and projected numbers and kinds of off-farm agricultural occupations in the community to be served. The second is evidence of the training needs essential to workers in the occupations identified.

Although there are many ways to acquire such information, there are some that have been used with success and may be applicable in many communities. In New York State sixteen teachers of agriculture examined the agricultural occupations in their respective communities during the months of July and August last year. Each of these teachers applied a systematic method of gathering information concerning off-farm agricultural employment. A brief outline of the method follows:

Phase 1:

- Identify the geographic area to be served.
- List the off-farm agricultural businesses and services in the area or any business requiring workers with agricultural competencies.
- Verify these locations of agricultural employment with:
 - Agricultural Advisory group
 - School Administrators
 - Other knowledgeable persons in the community

Phase 2:

- Contact employers in the agricultural businesses and services of the identified area.
- Determine present and projected opportunities in the agricultural occupations identified.
- Determine competencies needed by employees.

The outline suggests possible routes to identifying the training needs of workers in off-farm agricultural occupations. In most programs "training for farming" remains as a major responsibility. To stay abreast with this responsibility it will be essential to identify the opportunities and current training needs in farming and ranching. This will require sources of information such as census reports, farm management studies and on-farm observation.

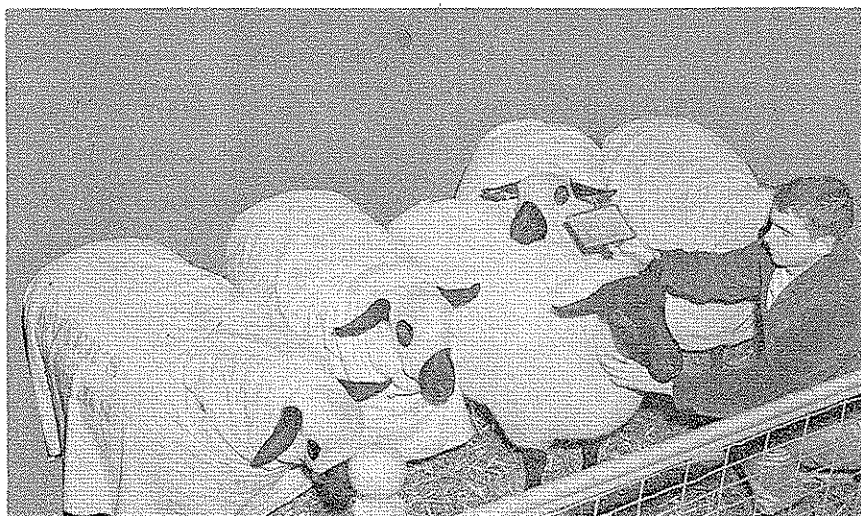
Using Evidence for Change

As information is gathered concerning the agricultural occupations complex in a community, decisions can be made with regard to the educational program. As evidence is analyzed and interpreted it will be necessary to involve advisory groups,

administrators and others who are responsible for developing and conducting the program. Evidence gathered can provide a basis for revising objectives and curriculums that are consistent with those objectives. When this task is accomplished, other problems such as in-service training, teacher time, instructional materials, experience programs, and new types of facilities must still be solved.

The Vocational Education Act of 1963 has opened the door for revising programs. State studies and efforts at the National Center are

gathering evidence about the nature and extent of the off-farm agricultural occupations complex. From such evidence emerges guidelines and tentative objectives showing the direction vocational agriculture might go. Within this framework the teacher of agriculture must continue to gather evidence for change within his local community. He must verify new directions and then implement a meaningful and realistic program in vocational agriculture which reflects the true changes in his community. □



Fairs may require more time than beginning teachers can justify.

Graduate Courses for Beginning Teachers — Friend or Foe?

GORDON BLOOM, Teacher of Vocational Agriculture, Reading, Mich.



Gordon Bloom

Should a beginning teacher of vocational agriculture enroll in graduate courses during the summer following his first year of teaching?

During the summer following my first year of teaching at Reading, Michigan, I took two courses for a total of six term credits of graduate work from Michigan State University. One, "Seminar on Wheels", involved traveling by school bus for one week to visit nine vocational agriculture departments in three states: five in Michigan, and two each in Indiana and Ohio. The other class, "Course Building in Vo-

Ag," involved the systematic study of the local community and the preparing of a general course outline for the local community situation. Only six half days were spent in class on the campus of Michigan State over the entire summer, starting in June and ending in mid-August. The amount of time actually spent away from the community for these two courses was one week for "Seminar on Wheels" and six half days for "Course Building." However one week of vacation time was relinquished and so, in reality, only about one week was spent in graduate work.

The remainder of my summer time was spent in such activities as farm visits, ordering supplies and equipment, overseeing the land laboratory and swine project, FFA meetings and

activities, and up-dating and analyzing departmental records. Also, one week was spent at the annual conference for teachers of vocational agriculture.

After having gone through a summer where graduate courses were taken, I can see both advantages and disadvantages. The advantages would be such items as: (1) It is a start towards a Master's Degree — an almost necessity in some school systems today, and certainly desirable if one is to pursue a career in agricultural education or related professions. (2) If the proper courses are selected it can be a very distinctive aid to teachers. By proper courses I refer to agricultural education courses as opposed to production courses or courses in guidance, counseling or administration. (3) An opportunity is offered to exchange ideas with experienced teachers as to how they have developed and carried out their programs. (4) Many salary schedules

allow salary increases for completion of credit courses beyond the bachelor's degree.

Two disadvantages appear to be quite obvious: (1) Graduate courses require much time for the in-class instruction and the preparation of reports. (2) The teacher must be out of the community part of the time. Usually something has to be slighted and in my case, the number of farm visits was undoubtedly reduced because of participation in the graduate courses.

However, the advantages seem to outweigh the disadvantages. Probably the greatest precaution would be to avoid overburdening oneself by attempting to enroll for too much credit and thus make it necessary to be away from the community for too much time. In all instances, one's decision should be made only after carefully planning one's total summer schedule and discussing it with the administrators of the school. □

The "Three R's" of Summer Conference Planning

R. A. McKINNEY, Supervision, Indiana

There are three basic concepts that I would like to discuss in planning for a summer conference for vocational agriculture teachers. Let us entitle these concepts "The Three R's": Re-training, Reunion, and Revival of workers in the field of Vocational Agriculture Education.

Now as at no other time a great emphasis is being placed upon all phases of education, not only at the local level but also at the state and national levels. There is a need for providing quality programs in vocational agriculture built around a new concept, that of training for occupations in the broad field of agriculture. This change in the concept and understanding of vocational agriculture demands that agriculture teachers be provided with the best training and, in many cases, re-training to provide the background needed in the skills and abilities required for many new occupations in agriculture today. A course of study or a program of work is of little value today if it has not been recently evaluated, revised, and up-graded.

Retraining Necessary
Technology in agriculture is chang-

ing more rapidly with each passing year. Specialization and intensification have increased at a rate found at no other time in the history of a country. The field of agriculture requires that the vocational agriculture teacher receive the best, most up-to-date, and forward-looking training possible. Courses of study and curricula are being changed. This demands a need for up-grading the teacher. New tools, equipment, and techniques are being added to the teaching situation. The teachers must be provided with the training to utilize this new "Kit of Tools." It has been said that each individual will change jobs at least four times during his working lifetime. The agriculture teacher who remains in his profession must be trained or re-trained many times if he is to meet the changing needs of agriculture.

Reunion for Problem Solving

As we plan our summer conference, we should set aside a portion of our time so that our teachers may become prepared to maintain the excellence in teaching that has so long been the label of the vocational agri-

culture teacher.

Let us now turn our attention to that phase of our conference which I call the "Annual Reunion." Vocational agriculture teachers are a special breed. Most of them have had the same experiences in their relationship with rural families as they plan for supervising work experience programs and follow-up of classroom instruction on the farm. This phase of our conference provides the teacher with the opportunity to exchange ideas with other teachers and to discuss common problems and experiences. Those of us in supervision and teacher training need answers to the questions to today's problems. Many of these problems were non-existent last year or the year before. Our summer conference must provide the opportunity to solve these problems and answer these questions. The "Team" approach perhaps is the best technique. Teacher trainers, supervisors, and teachers need to reach a common ground as they utilize the problem-solving technique in answering these questions. A summer conference provides the opportunity for the agriculture teacher to return to the campus where he had his training, to renew acquaintances, and to discuss problems with individuals who were so important in his pre-service training. He may have the opportunity to visit the agriculture school and to discuss privately with the research and agriculture specialists his individual problems in his community. This type of contact and relationship should be provided in the conference planning. It can give renewed vitality and energy for a program in vocational agriculture that cannot be found elsewhere.

Revival of Professional Faith

The last "R" which I would like to discuss is that of revival. A minister at one time said to me that the real benefit of an old fashioned revival is the revitalizing of the old group. It provides the reassurance and the re-establishment of one's faith in those truths that are so important to each individual. A summer conference should furnish the same opportunity. Each vocational agriculture teacher should be able to reaffirm his faith in agriculture, in rural America, and in the youth of today. Those individuals responsible for planning a summer conference would be remiss if they did not include this phase of the program as part of the conference.

Joint planning by supervisors, teacher trainers, and teachers will provide a desirable atmosphere and setting to make possible the opportunity for each vocational agriculture teacher to receive Re-training to up-grade his abilities and skills, Reunion with co-workers and with former instructors to share common experiences, and Revival of his faith

in vocational agriculture. The "Three R's" of summer conference should increase the teacher's ability to meet the problems which added opportunities now impose upon each vocational agriculture teacher, and should make of him a new vital force as he works with the individuals who are enrolled in his department in the local community school. □

Research Studies Completed in 1964

GLENN Z. STEVENS, Teacher Education, The Pennsylvania State University



Glenn Z. Stevens

Four major divisions have been made in classifying the 148 titles of studies published and reported to the research committee of the Agricultural Education Division, American Vocational Association, at the 1964 annual convention session. The divisions are Administration, including program planning; Guidance, with a subdivision calling special attention to the unusually large number of studies of "Occupational Opportunities and Educational Needs"; Instruction; and Teacher Education.

All studies were made by staff members, with the reports being available from the respective departments in the several states, or by graduate students for advanced degrees. The latter manuscripts are available from the university libraries or department offices.

Abstracts of selected studies in this list will be submitted for publication by the Office of Education, quite possibly in a new series including research in all subject fields of vocational education. In the meantime, readers may look forward soon to receiving one more supplement in the series of Summaries of Studies in Agricultural Education. It will include abstracts of 144 of the reports listed in the December 1964 issue of *The Agricultural Education Magazine*.

Editor's Note: Members of the Agricultural Education Section of the American Vocational Association for 1965-1966 include: Gordon I. Swanson, Chairman, University of Minne-

sota; Earl S. Webb, Texas A. & M. University; James D. McComas, New Mexico State University; Harold R. Crawford, Sac City, Iowa; Gene M. Love, The Pennsylvania State University. and Duane M. Nielsen, U. S. Office of Education.

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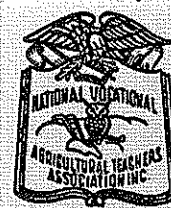
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N.V.A.T.A.
News

James Wall
Executive Secretary
NVATA

News and Views of the Profession

Dr. C. C. Scarborough Is New Editor



Cayce C. Scarborough

Cayce C. Scarborough, Chairman of the Department of Agricultural Education at North Carolina, Raleigh, North Carolina, will become editor of The Agricultural Education Magazine

July 1, 1965. Dr. Scarborough is exceptionally well qualified to serve as an editor. He has been an active special editor representing the Southern region for the past 4 years. He has been a frequent contributor to the Agricultural Education Magazine as well as the AVA Journal, Adult Leadership and other professional magazines. He is also the author of 2 books published in 1959 and 1960.

Dr. Scarborough is a native of Alabama. He received his B. S. and M. S. Degrees in Agricultural Education at Auburn University and he received his Ed. M. and Ed. D. Degrees at the University of Illinois.

Dr. Scarborough served several years as a teacher of vocational agriculture in Alabama and was a supervising teacher for student teaching. He was later appointed District Supervisor and Executive Secretary for the Alabama FFA Association. His next position was that of a teacher trainer in Alabama.

Dr. Scarborough is at present, a member of several professional organizations. He is past President of the American Association of Teacher Educators in Agriculture and has been an active participant in the American Vocational Association, The Adult Education Association, The AAUP, the NEA, the NVATA, and the North Carolina Vocational Agriculture Teachers Association.

Cayce and Margaret Scarborough have two daughters and a son.

In addition to these formal qualifications Cayce is blessed with a down to earth, practical understanding of Vocational Agriculture. He is an independent and imaginative thinker. He has the courage to back his convictions and along with all of these qualifications a delightful sense of humor. The magazine should prosper and improve under his direction. □

S. S. Sutherland Retires

After 43 years in Agricultural Education, S. S. Sutherland is retiring from the University of California, Davis, California, on June 30, 1965. A long-time researcher, author, and contributor to the profession, Dr. Sutherland was recognized with the distinguished service award of The American Association Of Teacher Education in Agriculture in 1963. "Sid" says his immediate plans calls for catching up on the golfing, fishing and traveling which he has been unable to sandwich in to his present job in sufficient quantities. He also says that he and Mrs. Sutherland will continue to make their home in Davis and will welcome visits from any associates whose travels bring them to California.

Effective March 1, 1965, Dr. Virgil E. Christensen will assume the duties of Assistant to the Director of Research at Cornell University. His major administrative assignment will be to keep abreast with Federal, State, and other programs which are of concern to the College as they relate to our responsibilities in teaching, research, extension, and international development. Where appropriate he will spearhead the development of proposals for financial support. More often he will help department heads and professors locate possible avenues of support and when necessary will assist them in the preparation of first-rate proposals. □

James Durkee, Harold Crawford and James Wall represented the NVATA at a national meeting on Agricultural Occupations held at the National Center, Ohio State University, Columbus, Ohio.

* * * * *

The Midwest Premiere of the National FFA Leadership Film was held at Audubon, Iowa on April 22, The Audubon Chapter was featured in the film. James Hamilton, a past president of NVATA, is the chapter advisor. The film was preceded by a banquet which was attended by over 300. The Honorable Jack Miller, United States Senator, was the principal speaker.

* * * * *

The policies of the NVATA state, "The vice-president should endeavor to visit each association in his Region at least once during each three year term."

The NVATA assumes the expense of these visits. Associations desiring more frequent visits, are asked to assume the expenses. The vice-presidents are presently accepting invitations and organizing their summer activities.

The request should be made directly to the regional vice-president by both the state president and the director for Agricultural Education. In making such a request, the association should be willing to permit the vice-president to meet with the State Executive Committee AND provide time in the schedule for him to speak before the entire membership. Between 15-30 minutes should be allotted for the "chat" with the membership.

* * * * *

It is time to renew your subscription to the Agricultural Education Magazine. Most associations solicit subscriptions during their state conference at the same time dues are collected. Many associations include a subscription to the magazine as a part of the dues "package". No worker in vocational agricultural education can afford to do without a subscription to his professional magazine.

Guidelines for Developing Agricultural Technician Training Programs

By JOE R. CLARY, State Supervisor, Introduction to Vocations, N. C. Department of Public Instruction
Raleigh, North Carolina



Joe R. Clary

One of the most significant changes occurring in the occupational structure of the United States today is the rapid growth of occupations which lie between the fields

of the skilled crafts and engineering. These occupations contain many new jobs of a technical character, varying widely in the scope and level of the tasks performed and in the nature of the activities carried out. The workers in these jobs have come to be known as technicians.

This rapid change in the occupational structure in the United States has resulted in a critical shortage of these technicians. These shortages are not limited to the engineering or medical fields but include agricultural technicians.

The total education system has failed to develop sufficient programs to prepare the increasing numbers of technicians and semiprofessional personnel needed. Karnes has called this a major void and suggested that efforts to fill this void will represent one of the significant developments in American education.¹ McLure suggested that it was the greatest gap in the educational fields today² and called for greater efforts from states in developing technician training programs.³ The recent Panel of Consultants on Vocational Education recognized the need for the development of training programs for technicians in *all* fields.⁴

¹ M. Ray Karnes, "Technical Education," *Review of Educational Research*, XXXII, No. 4 (October, 1962), 423.

² William P. McLure, "The Future of Vocational and Technical Education," *American Vocational Journal*, XXXVI (March, 1961), 8.

³ William P. McLure *et al.*, *Vocational and Technical Education in Illinois: Tomorrow's Challenge* (Urbana: Bureau of Educational Research, College of Education, University of Illinois, 1960), p. 77.

Need for Agricultural Technician Training Programs

Technological advances in agriculture have resulted in an increasing need for highly trained individuals with special knowledge and skills to manage specialized farming operations, for specialized occupations within these operations, for specialized work with agricultural businesses and industries, for government educational, service or regulatory functions, and other types of specialized agricultural occupations.

Halterman identified 11 types of agricultural technicians in California alone. But he emphasized that "there are no technical institutions as such qualifying technicians in agriculture."⁵

Reese and Woodin recognized this problem in a 1957 study in Ohio. The concluded, "A young person wishing to prepare for a professional career has no problem doing so, but where in Ohio can a young person prepare himself for any one of the many skilled and technical positions, not requiring college training, which are available in industry, business, agriculture, and sales fields?"⁶

Other writers have reached similar conclusions.

Status of Present Training Programs

This is a brief report of an exhaustive attempt to try to identify public post-high school institutions, excepting four-year colleges, with organized curricula designed for the preparation of agricultural technicians. Only twenty-five such institutions were identified. These could be classified as either technical institutes,

⁴ *Education For a Changing World of Work*, Report of the Panel of Consultants on Vocational Education (Washington: Office of Education, U.S. Department of Health, Education, and Welfare, 1963), p. 14.

⁵ Jerry J. Halterman, *Technicians in Agriculture* (Sacramento: California State Department of Education, no date), p. 48.

⁶ Robert M. Reese and Ralph J. Woodin, *Meeting Ohio's Needs for Vocational and Technical Education* (Columbus: Ohio State Department of Education, 1957), p. 20.

junior colleges, comprehensive community colleges, or area vocational-technical schools. These 25 institutions had a total of 59 training programs for agricultural technicians in operation with 21 additional training programs in the planning stage. These could generally be classified under one of the following categories: Agricultural Business and Management, Agricultural Technology, Animal Science Technology, Plant Science Technology, Horticultural Technology, Forestry Technology and Agricultural Engineering Technology.

It should be pointed out that other institutions also train agricultural technicians. There are almost certainly some private institutions which do this. Large agricultural businesses and industries may operate training programs for training personnel to operate at the technician level. A number of colleges and universities operate agricultural institutes or other types of training programs as part of their colleges of agriculture and train personnel at the technician level.

Need for Guidelines for Planning Programs

With the development of many new programs for the training of agricultural technicians and with many programs to be developed within the next few years, the need for some guidelines for planning and conducting these programs is evident.

While the approach to program planning in a given community, a given institution and for a given type of program depends on many factors, and while uniformity of pattern is neither desirable nor essential, the most effective results are usually obtained when basic or fundamental guidelines are followed in the development of the program.

The Guidelines

The guidelines suggested below were developed after an extensive review of literature on technician training programs, a survey of a

jury of experts in the technician training field, a survey of procedures used in establishing agricultural technician training programs and visits to a number of institutions with such programs.

Space will permit only a listing of the guidelines. Future articles will deal in detail with some of the more crucial areas.

OBJECTIVES: *Agricultural technician training program objectives should reflect the unique characteristics of technical education of less than the baccalaureate degree, but above the high school level.*

TYPES OF PROGRAMS OFFERED: *The types of agricultural technician training programs to be offered should be determined with primary but not exclusive attention to occupational (job opportunity), educational and interest surveys of people and industries to be served.*

CURRICULUM CONTENT: *Curriculum content for agricultural technician training programs should be closely related to present and future occupational needs.*

RECRUITMENT: *A planned recruitment program should be developed to acquaint prospective students with the opportunities for becoming trained as agricultural technicians and for employment upon successful completion of this program.*

SELECTION: *Selection of students for agricultural technician training programs should be based on interests, aptitudes, previous education, intellectual capacity and back-*

ground experience—the criteria varying with the occupations for which training is given.

COUNSELING: *Institutions providing agricultural technician training programs should develop an adequate counseling and guidance program, coordinating it with counseling programs of local schools and the Employment Security Commission.*

PLACEMENT AND FOLLOW-UP: *Placement and follow-up services in agricultural technician training programs should result in graduates being placed in the jobs for which they were prepared and also provide information for proper analysis of program effectiveness.*

RESIDENCE FACILITIES: *Residence facilities should be made available for students enrolled in agricultural technician training programs when sufficient need is demonstrated based on the opportunity of students to obtain programs of their choice which are not available to them otherwise and when the addition of these facilities serves as a means to enable the institution to more fully meet its objectives.*

LIBRARY: *Students enrolled in agricultural technician training programs should have ready access to a well-organized, appropriately coordinated library which provides a ready reference to up-to-date information and which has an appropriate range of authentic and professional publications in the area of work for which technicians are being trained.*

INSTRUCTIONAL STAFF: *The*

instructional staff in agricultural technician training programs should have technical occupational competence in the area for which training is offered and should understand and be proficient in teaching skills and competence essential to successful performance as an agricultural technician.

FACILITIES AND EQUIPMENT: *Adequate and appropriate facilities and equipment are essential and should be made available in the training of highly competent agricultural technicians.*

ACCEPTANCE: *Planned and continuous efforts should be made to increase the acceptance and prestige of technician occupations (including agricultural technicians) and technician training programs.*

EVALUATION: *Continuous and planned programs of evaluation should be characteristic of agricultural technician training programs.*

ACCREDITATION AND LICENSING: *Agricultural technician training programs should become accredited and/or licensed as early as possible by a recognized accrediting or licensing agency in order to assure the public that some kinds of recognized standards are being met and to protect graduates from pseudo-technician graduates.*

LOCATION: *Agricultural technician training programs should be located in institutions in areas of population and agricultural industry and business concentration so as to be readily accessible to those whom they are designed to serve. □*



G. A. Sherman

Technician Training in Agriculture— A New Challenge

G. ALLEN SHERMAN, Dean of Agricultural Education
Mount San Antonio College, Pomona, California

Few agricultural educators would disagree with the statement that agriculture has changed radically during the past few years. Labor statistics continually show that the production segment of farming is decreasing. However, what these statistics fail to show is that as the total number of people in farming decreases, these decreases are more than offset by increases in other types of agricultural occupations. These increases fall into

the business and technical areas of agriculture. Thus, it is vital to us, as agricultural educators, to re-evaluate our programs to insure that what we are teaching meets the needs of these new agricultural occupations.

During the past few years, enrollments in agricultural colleges throughout the nation have been extremely low in proportion to the opportunities for graduates. Because of this problem, consideration has been made of a

plan for training technicians to aid the college graduates. It was felt by some educators that the junior college could fill the role of training these technicians. Studies have already been started to determine the need for such technicians and the most effective methods for training them.

The Mount San Antonio Study

A study was made at Mount San Antonio College in 1962, under the

auspices of the California Bureau of Agricultural Education and the NDEA, to survey such a plan. This study included the following points: the number of technicians employed in the area; whether a shortage of trained personnel existed; the type of training needed in these occupations; and the program and equipment needed to offer such training.

For the purposes of the study, a technician was defined as one who is called upon to make mental judgments or decisions and who also may need to do manipulative skills in the course of his employment. Occupationally, this places the technician on a level above the skilled worker and on a level below the professional worker, such as the scientist or engineer. During the course of his work, the technician may be called upon to do tasks of the skilled worker and of the professional worker. With this definition in mind, it is assumed that the technician will need specialized training beyond the high school level, but less than that leading to a B. S. degree.

The need for such technicians in the California area will be shown. The need on a national level was found in a study in 1960 by Robert S. McGlothlin of the Stanford Research Institute. This study pointed out the changes in relationship between the production segment (farming) and the nonproduction segment (farm business, etc.) in the United States.

From 1910 to 1954 the growth (value added) of the farm production segment tripled in amount but dropped proportionately, from a little more than one half of the industry total to slightly under one fifth. Conversely, the value added by the non-farm segment of agriculture increased fifteen times in amount and rose to a little over four-fifths of the industry total. This study found there is little indication that this trend will change in the next several years. The decline in the number of people involved in the farming segment has been almost exactly balanced by a rise in the non-farm segment. Due to a decline in enrollments in agriculture colleges during the past twenty years, the colleges are falling short of supplying the needed graduates in these related areas. By 1970, McGlothlin stated, it is estimated that only one in five of the people needed in the agricultural industry will come from the agricultural colleges.

As a result of this shortage of trained workers and competition from other industries, competition in the job market has become keen. Students are able to be particular about which job they choose. It is reasonable to expect that some jobs with lower starting salaries will be increasingly difficult to fill. Many of these jobs could be handled by qualified graduates of junior colleges.

In some industries it may be desirable to hire technicians to handle routine work under the supervision of professional people. This could be advantageous in that fewer professional people might be needed and, therefore, could command higher salaries.

Another factor to be considered in the training of technicians is the value to the student who, for one reason or another, drops out of school before completing training for an occupation. A two year course in applied science could give this student a desirable occupational training.

51 Different Jobs

The Mount San Antonio study found that in California, in the area of public service agricultural technicians alone, there were over fifty-one different kinds of jobs available for two year students. Public service technicians include those who are qualified to provide technical service to governmental or private firms. Such activities as control, standardization, inspection, grading, certification and quarantine of agricultural products would be included.

After reviewing the number and types of jobs available, the type of curriculum needed was considered. Employers were asked for their recommendations. The main areas of instruction suggested by the employers were: fertilizers, pesticides and insecticides, chemistry, standardization, vertebrate pests, soils, botany, weeds, truck crops, and agronomy. In addition to the regular general education courses such as English, history, and mathematics, the employers stressed human relations. They pointed out that in working with the public, scientific training is useless unless the person can get along with people. In the business area, the employers stressed business principles and personnel management.

Curriculum Change Necessary

After evaluating the data collected in the study, it became apparent that some new courses should be added to the curriculum. A course in agricultural science should be established for those students not taking full col-

lege courses in botany, zoology and chemistry. Agricultural science would stress the scientific principles of these subjects and their application.

New courses in wildlife management, conservation of natural resources and introduction to forestry will be needed for forestry technicians. Forestry was one of the areas in which the largest number of jobs was available. Forest rangers are at present working with the college in establishing a full program. A trial group of students is working for the forestry department during the current season. The work and needs of these students will be evaluated in establishing the curriculum.

In the agricultural inspection area, two new courses are planned, fruit crops and pest control. Fruit crops will be covered more from the variety identification viewpoint than from production alone. The pest control course will supplement the present course in entomology.

For some of the technicians, the areas of farm mechanics and surveying were stressed. These courses are already in the curriculum and will be continued. In the food processing industry, however, the employees should know food processing machinery care and operation. As a result, a new course in agricultural mechanization is being developed. The course will stress the various types of machinery used in food processing rather than on the farm.

Three Training Programs

Due to the wide diversity of technician's jobs, it would be impossible to set up individual programs for each job. However, three basic technician training programs were decided upon. These would be oriented toward animal science, plant science and agricultural engineering. Since it is difficult to cover everything that may be desired in agricultural science, business and general education in two years, the programs are planned to allow as much specialization in depth as possible. It is anticipated that students will do independent study on a project basis. Students will be urged to carry on laboratory projects in their spare time, just as the other students conduct livestock or crop projects. It is hoped that the many summer job possibilities will help stimulate independent study by the students.

The animal science technician program is intended for students who wish to train for livestock or meat inspection, brand inspection, animal

research, range conservation and animal laboratory technicians.

The plant science program is designed primarily for students interested in agricultural inspection, forestry, turf grass management, plant research and soil conservation.

The agricultural engineering program is for those who wish to train for jobs as agricultural mechanics, surveying aids, forestry aids, weights and measures technicians, soil conservation and food processing.

College staff members visited various laboratories in order to compile a list of items of equipment which would be needed for the laboratory exercises. Only items which were important to a two year course of study were selected for purchase. It is felt that students in the technician program should be as familiar with the use of moisture testers, microscopes and other laboratory apparatus as the production major is with sheep shears, dehorners and show halters.

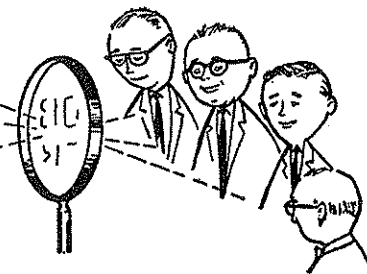
In Summary

The Mount San Antonio College survey has shown that there is a need for the training of agricultural technicians. The need for trained workers is not even now being met because of decreased agricultural college enrollments in the past few years. The employers surveyed showed that there are many jobs which could be handled by two year graduates working under the supervision of professional workers. The technician is not intended to be as fully qualified as the four year graduate.

The survey found that the present type of training for farm employment would not be suitable for the type of technicians needed in such areas as the food and processing industries and public service agencies of southern California. Many of the present courses could be utilized, but many new ones need to be offered. The curricula which have been developed for plant, animal and engineering technicians are intended to furnish the student with enough background from which to enter and advance in an occupation. With agricultural technology advancing as rapidly as it is, it appears to be unwise to develop individual curricula for each type of technician. Rather, specific courses can be changed to give emphasis to the various career training programs.

Educators must be alert to the changing needs of agricultural education. Technician training is one of the new challenges. □

BOOK REVIEWS



HANDBOOK ON AGRICULTURAL EDUCATION IN PUBLIC SCHOOLS. Lloyd J. Phipps. Published by the Interstate Printers & Publishers, Danville, Illinois. 774 pages, illustrated. 1965. Price \$8.95.

This book replaces the Handbook which was THE standard reference for so many years. The content of the new Handbook includes material on Public Law 347, The Vocational Education Act of 1963, which makes many sweeping changes affecting agricultural education and makes obsolete much of the material in existing books on the subject.

All aspects of the total program in vocational agriculture are covered in detail in this Handbook; the F.F.A., agricultural mechanics, program planning, in-school and out of school programs, and other aspects of the program are well covered. This is an authoritative manual which provides a complete and detailed coverage of the principles and practices necessary to teachers of agriculture today.

The new Handbook will be a welcome addition to the professional library of every teacher of vocational agriculture, to the school administrator whose school program includes a program of vocational agriculture and to others who have an interest in this vital work of America's economy.

Professor Phipps, the author, is chairman of the Agricultural Education Division, University of Illinois.

GUY E. TIMMONS

Michigan State University

INTRODUCTION TO AMERICAN EDUCATION. Paul Woodring. Harcourt, Brace, and World, Inc., New York. 1965. pp. viii + 120. Paperback. (No Price Given)

The purpose of this book is described in the preface where the author states that, "... the education of teachers for elementary and secondary schools should include a judicious blend of three interrelated but distinguishable elements: broad liberal education, scholarly preparation

in the subjects taught, and professional education."

The author goes on to say that the professional education should include courses drawn from several disciplines such as philosophy, history, psychology, and sociology, but with these interpreted, organized, and integrated to be most meaningful to teachers and prospective teachers. This book is the first of a series intended to present the professional education aspects of teacher preparation. The book consists of six chapters: (1) The Nature and Scope of American Education, (2) The Teacher's Part In Education, (3) The Goals of Education, (4) Social Change and Educational Reform, (5) Equalizing Educational Opportunity, and (6) Teaching As a Profession.

With the increasing emphasis on the need for broad and comprehensive vocational education programs, it becomes increasingly important for vocational teachers to have a sound background in the professional aspects of their training. This book, along with others in the series, should make a valuable contribution to this part of vocational education.

Dr. Woodring is editor of the educational supplement of the *Saturday Review* and distinguished service professor at Western Washington State College.

RAYMOND M. CLARK

Michigan State University

EDUCATION AND DEMOCRATIC IDEALS. Gordon C. Lee. Harcourt, Brace, and World, Inc., New York, 1965, pp. x + 181. Paperback, Price \$1.95.

This is the second in a series of books dealing with the content of professional education needed for all teachers at the elementary and secondary levels. Eight additional books are in preparation as part of this series. The first of the series was written by Paul Woodring and is entitled "Introduction to American Education."

This volume dealing with "Education and Democratic Ideals," presents

philosophical backgrounds of modern educational thought. For the most part, these are briefly presented from original sources. These presentations are then interpreted in terms of the present-day educational system. In line with the overall purpose of the series, the author describes in the Epilogue, Chapter 10 of the book, "personal evaluations of some of the central elements in the experimentalist ideology," and suggests, "some of factors that must be taken into account as we attempt to develop and clarify an educational orientation for the remarkable new stage ahead in the history of American education."

The book is a valuable reference for preservice preparation of all teachers and for upgrading teachers at the Master's level.

Dr. Gordon Lee is a member of the faculty at the University of Washington.

RAYMOND M. CLARK
Michigan State University

AGRICULTURAL ENGINEERING, A DICTIONARY AND HANDBOOK. Arthur W. Farrall, and Carl F. Albrecht. The Interstate Printers & Publishers, Inc., Danville, Illinois, 1965. Price \$7.50.

This book contains the answers to hundreds of questions encountered by agricultural workers. The first part of the book contains 9,000 definitions of words and terms used in agricultural engineering and agriculture. The second part of the book is made up of 63 tables and charts which have a wealth of frequently used technical reference material. These tables and charts show weights and measures, field machinery efficiency guides, crib, bin and tank capacities, safe beam and joist loads and the like. It gives simple, non-technical, easy to understand definitions and descriptions. Power, machinery, electric apparatus, buildings, irrigation, drainage, soil conservation, materials handling, processing, storage, drying and many other subjects are covered in the book.

This 464 page book will be of value to engineers, agricultural teachers and students, county extension directors and specialists.

Professor Farrall recently retired after having served 19 years as Chairman of the Department of Agricultural Engineering at Michigan State University.

Professor Albrecht is a nationally recognized authority who was formerly Director of Agricultural Education in Minnesota and currently is in charge of work in agricultural mechanics at Michigan State University.

GUY E. TIMMONS
Michigan State University

HUXLEY, THOMAS, "Science and Education" (General Editors Gadobert D. Runes and Thomas Kiernan). Philosophical Library, New York, 1964. pp 381. Price, \$7.50.

This book is a compilation of some of Huxley's writings in science and education. For example, one of the articles deals with "Emancipation—Black and White." Another deals with "Science and Culture." A third deals with "Elementary Instruction in Physiology," and still another is titled "The School Board: What They Can Do and What They May Do." Still another item deals with "Technical Education," and another is titled "Address on Behalf of the National Association for the Promotion of Technical Education." Dates of these writings range from 1854 to 1884. Teacher educators and those preparing to teach in the vocational education fields will find this an interesting book as a reference.

RAYMOND M. CLARK, Professor
Agricultural Education
Michigan State University

C. BARNARD, Editor, "Grasses and Greenlands." St. Martin's Press, Inc., New York, 1964, pages 269. Price \$10.

As indicated in the preface, this volume brings together much of the research efforts in grasses and pastures of the British Commonwealth Scientific Research Organization's Division of Plant Industry. The volume consists of 14 chapters dealing with such subjects as the history of grasses; grass systematics; distribution of grasses; and many others. Chapters 12 through 14 deal with nutrition, grazing and relation of grasses and grasslands to soil conservation.

The book is, essentially, a college level text. It should be a valuable reference book for technician level training of Vocational Agriculture students in area Vocational Schools or Community Colleges.

RAYMOND M. CLARK, Professor
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Michigan State University

MILLER, RAYMOND W., "A Conservative Looks at Cooperatives." Ohio University Press, Athens, Ohio, 1964. 245 pages. \$5.00.

Miller's point of view is that the cooperative arises because of the need of farmers, businessmen, professional and other groups to function competitively in a market dominated by large corporations.

The book should be a valuable reference in advanced courses in vocational agriculture at the high school, adult, and community college levels.

RAYMOND M. CLARK, Professor
Agricultural Education
Michigan State University



Planning and cooperating for an improved county agricultural program is the purpose of the Edmunds County, South Dakota, Joint Agency Committee. The group which meets monthly, is comprised of representatives of all public agricultural agencies serving the county. This group was formed in 1963 and has made possible an efficient and progressive program of agricultural education and service for the community.

Photo by James Hanneman

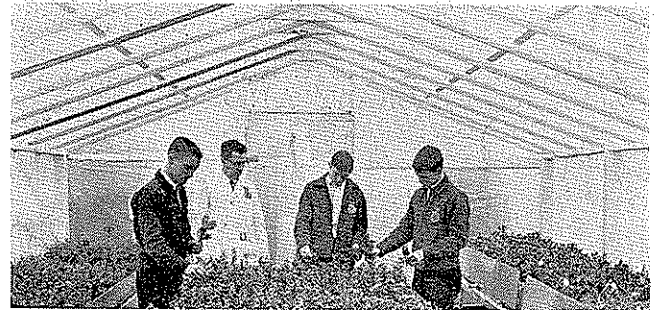


A Holstein success story is depicted here by Ray Woodside of Issaquah FFA Chapter in Washington. Shown in this picture are his Grand Champion, Reserve Champion and Junior Champion at the Evergreen State Fair at Monroe, Washington.

Stories in Pictures



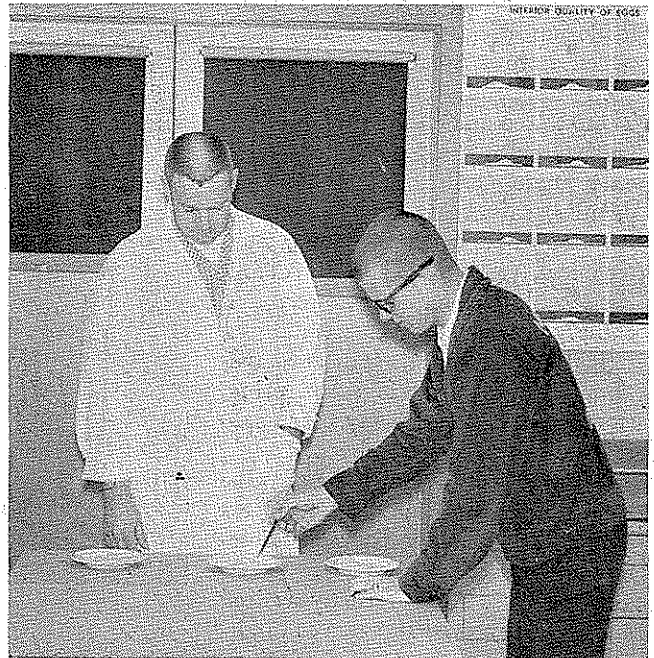
Russell Wolford (on tractor) and Jim Roberts of Goodrich FFA chapter in Michigan planting FFA corn. Various varieties used as demonstration plots.



The plastic greenhouse finds favor with North Carolina teachers as a facility for teaching plant science.



Preston Mote, a member of the Young Farmer group in the Milton Union (Ohio) Vo-Ag. department, is shown in this picture checking some of his seed leaf tobacco. While in FFA Preston's project grew to twenty acres of top quality tobacco.



Jim Cooley, Bath Chapter of FFA, Michigan, verifies to Charles McGinnis, contest judge, the grades of the last 3 of 25 eggs which he candled as a part of the FFA Poultry Judging Contest.