Stories

Ollie Watkins, past president of Association of Agriculture Teachers of New York, at right, presents retirement awards to three ATANY members who are joining him in a well-earned retirement. Left to right: V. O. Linderman, Howard Fisley and J. O. Sanders.

Pictures

GILBERT S. GUILER
Ohio State University

Officers at the newly formed Agricultural Education Society of the University of Kentucky. Left to right (standing) Bruce Martin, Secretary; Virgil Oliver, Senior; Jack McKittrick, Vice President; (seated) Joseph White, Treasurer; Dr. Herbert Beers, Department of Agricultural Education; and W. Crowder, Historian. Photo by Lubin.

ALABAMA TEACHERS FIND TEACHING IN THE GREENHOUSE VERY EFFECTIVE.

FEATURING TEACHING EFFECTIVELY

1917 50th ANNIVERSARY 1967
1st National Vocational Education Act
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What Is It?

Teaching Effectively

Some of our more thoughtful writers in the area of teaching and learning went out that everyone agrees in general but disagrees in specifics when talking about good teaching! Perhaps much of the lack of agreement is due to allowing only bits and pieces rather than trying to see the big picture. Some look at what a teacher does, for example, while others want to know what the students learn. The hope of this editorial is not to seek agreement on what is teaching effectively, but to get each of us to keep this question before us as we go about our own teaching jobs.

The first step, I believe, toward becoming a more effective teacher is to forget the idea of being a good teacher. Neither should anyone try to teach like someone else. A young ag teacher makes a mistake if he tries to teach like his ag teacher. The problem is to center on one's own identity; identify strengths and weaknesses, build on the former and reduce the latter.

The second step, really mixed in with the first because I cannot identify my strengths except based upon some norm or criterion, is to clarify my objectives in teaching. Oh yes, this is the place where many of us do not do this important job very well. Not only do we need to be able to clearly state those objectives in behavioral terms that mean something, but also to identify the behavior of the student that will clearly indicate that my teaching objective has been reached in that student. "To know... is not a very helpful way to state an objective. "To understand... is not much better, because we still must have agreement on what it is we understand!" So you are stating objectives for a class by asking the students to explain to you what they'd objectives mean to them.

The point is that there is a dynamic quality to effective teaching. That is essentially inarticulate and students and teacher in a particular teaching situation. From a summary of major findings in more than 40 years of research in teaching effectiveness, the Journal of Experimental Education, September 1961, the following four major considerations:

1. Teacher acts are not good or bad in general but in context of particular, purpose, and situations. They may be employed in operational definitions of important variables in research for their effectiveness as and data for making inferences about potential fitness and professional competencies, but not as means of distinguishing good teaching from poor teaching in and of themselves.

2. The constitutions of effectiveness are not found in teachers or in pupils, in the person or in the situation, but in the relationship that exist among those at any given time and place. The learning-teaching situation is a dynamic situation and must be so treated.

3. Certain attempts to evaluate teacher effectiveness deal with certain types of variables that must be given consideration, such, for example, as the perception of teacher, pupil, parents, and administrators of what goes on and what it means. It is not enough to know merely what it is, but it is equally important that we know what people think it is.

4. Many people have expectations relative to teaching: other teachers, superintendents, administration, pupils, parents, community members, etc., and these expectations must be given careful consideration in particular teaching and learning situations.

It would appear that these four points might be worthy of our consideration.

Certainly the traditional problem-solving approach with the student at the center of the process will keep the alert teacher of vocational agriculture working at the same level of competence as the student. Whether teacher educators, supervisors, and other teachers can keep their teaching dynamic in the existing situation is another question.

Cayce Scarborough

EDITORIALS

Theories and Practice

In a speech a few years ago, Sid Scarborough questioned whether the teacher of vocational agriculture was still the best teacher in the school. By implication Sid was suggesting that he was in earlier years but not now. Maybe this is a sure sign that Sid is losing his sense of the old days and that the world is moving on. On the other hand, he may be right: at least his view is worth considering. Anyway, in looking at the theme of "Teaching Effectively" maybe we can stop long enough to take needed actions to improve our own teaching, regardless of how we might compare with teachers at some other time, place, or school. It’s a worthy job, isn’t it? How am I teaching now?

Speaking of Professor Sutherland, did you read his prediction of things to come in Vo Ag by 1975? If you haven’t, see his last column in the March AFA Journal. It is easy enough to disagree with some of his ideas, but I think he was right in writing his prediction? I must warn you that Sid has a pretty good record as a prognosticator, did you not see that with his prediction that Ag Occupations other than farming would be an important part of vocational agriculture? Next year, The Band Wagon is getting real crowded.

Have you received a copy of Vocational and Technical Education? The attractive booklet contains several speeches from the AEC Summer Conference last year on employment in cooperatives including work experience. NYATA Leaders Jim Durkee and Jim Wall have statements in there too. If you don’t have a copy write the AEC, 1200 7th St., NW, Washington, D.C. 20005.

(Continued on next page)
LEETONER TO THE EDITOR

Dear Mr. Scarborough:

What would Happen If a well-conceived addition to the Agricultural Education Magazine, focuses upon an intensive offering of Agricultural education, first, may I say that we are relieved in finding that ninth grade students are far more variable in agricultural goals than we believe agriculture and farming are synonymous. In addition, I am certain that national and administrative requirements may not coincidentally influence our training of the present practices do not permit adequate exploration of agricultural opportunities and research, lead me to believe otherwise. A few selected observations to support my conclusion are:

1. Texas's efforts to develop a program of agricultural education exploration with supportive instruction resources.
2. The tremendous sales of texts, reference, and other instructional materials about agricultural occupations and guidance.
3. Michigan's long-standing emphasis upon a program of agricultural education guidance in the high school program.
4. A report indicating 17 percent of the teachers are using filmstrips and/or 250 slides in teaching agriculture, occupations, percent indicating they would use overhead transparencies if available and only two percent indicating agricultural education is a part of their course of study.

The key word is adequate and since neither Dr. Thompson nor I define adequate, this leaves an opportunity for someone to define adequate.

Sincerely,
Jim Bohnmann
Assistant Instructor
Michigan State University

Good point on that term "adequate," Jim, it's a slippery term subject to individual interpretation. Thanks, C.G.

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Dear Cayce:

I appreciate seeing your name mentioned in the Agricultural Magazine. I believe your editorial on "Aking the Right Questions" was certainly to the point, but I would certainly never as did Logig in the quotation which you used from his talk at Ohio State. I have never had any doubt that researchers in vocational education could ask the right questions. We need help from each other and from people outside the field in asking the right questions and but there is no doubt in my mind that eventually the right questions and will do this better than people who don't know enough about our work to even find the right ballpoint, let alone the right spot in the baldpate.

Rupert N. Evans, Dean
College of Education
University of Illinois

Good point, well made, Dear. It really helps if all concerned are as much alike in the same ball point! THANKS! C.G.

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Dear Mr. Scarborough:

While Professor Cardochiro's article "Research: What Is It?" from the Agricultural Education Magazine is as a whole, he does raise one point that I feel especially moved to question. He states:

"The recent fountain of funds for research has brought rising esteem to educational research, social science research large numbers of individuals who are perhaps better in terms of technical competence, but who have not been indoctrinated with the same professional standards and ethics as those of the past."

Talent at its literal meaning, I will agree that the more recently prepared educators are of course trained with the same standards and ethics of the more highly technically trained researcher, regardless of vintage, are more demanding than those of the past." As he later says in the same article, the researcher who is not knowledgeable of valid evaluation methods, validity check, reliability check, possible fallacies in statistical models, researcher bias, and other sources of experimental error is a matter of considerable concern because he will have trouble preparing for college.

Sincerely yours,
Glen Z. Stevens
Professor
Penn State Univ.

Dear Mr. Scarborough:

I am glad to see someone attempting to get us to focus more on the individual students in agriculture. I believe that the discussions of definitions will be a help to everyone. Overlap between categories will always be with us, terminologies will certainly always be with us. I would suggest certain words may mean one thing in Georgia and another in Oregon, and pressures and political will tend to influence our "official documents." Therefore, we need to generate some discussion of the current events in this direction before the tentative lists become permanently cast in bronze.

Each time the list of instructional areas is reviewed by a different group, we find changes being offered up to a point this is good. However, at some point in time we need to "get on with the show" remembering that it is much easier to pick someone else's list apart than it is to come up with a better one. Further, it is one thing to devise a terminology which agricultural educators can agree upon and another to gain consent from all other vocational, instructional areas and the many interests prior to discussion and dissemination.

I would strongly suggest that we meet the problem head on by including a discussion of the tentative instructional areas in agriculture during future agricultural conferences. Perhaps we even need to consider changing some laws since they may be a major deterrent in establishing high school vocational agriculture programs which are specifically oriented toward preparation for college.

I share your concern and as a member of the Advisory Committee which struggled with the problem, I sincerely hope we can come up with a universal agreement concerning the format and the specific instructional and occupational areas in agriculture.

James W. Hennel, Specialist
Agricultural Education
Center for Research & Leadership Development in Vocational & Tech Ed
Ohio State University

Thanks, Jim, let's try to keep the discussion going. It has been a wonderful starting point for many in agricultural professions, you and me, for example C.G.

Sincerely,
James W. Hennel
Specialist
Agricultural Education

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Dear Cayce:

I must agree with your seeing my name mentioned in the Agricultural Magazine. I had not seen your letter and if I am using it to get a hobby to get into self-made man is before you're too old to finish the job!"
How Good Is My Teaching?

CHARLES S. WIGGINS, Supervisor, New York

Time To Teach

As agriculture becomes more complicated and complex, and teachers and students are involved in more and more contexts, programs and activities, it becomes increasingly difficult to find time to teach what is believed to be important, rather than the problems of not having sufficient material to teach. It becomes a continual problem to fit into a course of study all material that a student should learn. This problem can be solved by (1) teaching a very little about many topics, and hoping that pupils will later in life complete their learning as they see need for additional knowledge; or (2) being more selective about what is taught, giving instructors greater detail, and presenters topic completely with the hope that pupils will later learn materials that have not been studied in class or some combination of the two.

Common Problems

For many students, vocational agriculture is a poor vocational. For many others, it is also exploratory, since they are not sure they wish to make agriculture their career or work, and are not sure which phase of agriculture to follow. All students, however, tend to develop efficient habits, a desire for learning and problem solving ability. Since we are teaching students, and not subject matter, methods appropriate to the class need to be selected for the subject being taught. By taking enough time to thoroughly explore one topic before proceeding to the next, it is more easily possible for a teacher to develop in students the common abilities of learning. It is more important to learn how to find out how to fertilize a crop, than to learn the specific recommendation since technical subject matter continues to change. The "why" is usually more important than the "how".

An Example

An example will illustrate the point. If the unit being taught is concerned with gasoline engines and the daily lesson is spark plug selection and maintenance, two different methods of a structure might be followed: (1) a unit reading on the subject and follow-up discussion or (2) have students examine engines, with correct and incorrect types of spark plugs and correct and incorrect terminal space, study the results, and determine what kinds of plugs and terminal gaps work the best. This second method will lead students to detailed study of operator's manuals and guides. The second method requires more class time than the first, but greater learning will result because of the opportunity to practice the problem solving method and become involved. All good teachers are concerned regarding the progress of their students, but being concerned in telling pupils what to do and how to do it is usually not enough. Most parents are interested in having their children learn to swim, and in an attempt to teach them, give much advice, but the child has to do it for himself. He has to become involved, make an effort, and with guidance from his parents, do it for himself. So it is with our pupils. They must, in order to be successful, become involved. A teacher can teach, but the learning is up to the student.

Learning is the Key

How much is studied in class is not nearly as important as how much is learned. Giving slow learners an opportunity to master the fundamentals, average learners greater competence and fast learners opportunity to improve their program, are the important things. For example, a subject is completely investigated rather than delved into only superficially.

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DON'T BE SO SLOW — GET AN SMV CAMPAIGN GOING

JOHN SCOTT, Vo Ag Teacher, Summer, Iowa

The tie clip (wear seemingly is very appropriate. By nature, I am a slow person, and I am very slow about things, so when members of the FFA Chapter presented me with a Slow Moving Vehicle emblem as a tie clip, I knew our Chapter Safety Program was accomplishing what it intended. Several members had learned to project a slow moving vehicle and were mounting the SMV emblem on that vehicle!

The Need

The campaign for the use of SMV emblems to this community has its start almost two years ago. The decision to conduct the program came following a survey made by the safety committee. This committee indicated that about 90% of the 217 vehicles on member's farms that were used on public roads, only 22 were equipped with the SMV emblem. Less than 1%. By comparison, only 5% of vehicles on 22 neighboring farms were equipped.

The Program

The Safety Committee recognized the need for a fresh approach to the annual farm safety program and recommended a slow to place at least 100 SMV emblems. Few local implement dealers and farm supply stores kept the SMV emblem in stock. Therefore, it would be necessary to purchase a supply of emblems. Very little promotional material or publicity had been released in this community. It seemed like a natural to implement the Chapter's safety program.

Promotional material was obtained from the National Safety Council and one of the manufacturers of the triangular emblem. Pictures and stories were supplied, the local newspaper releases prepared and the neighboring radio station. These releases described the emblem, its proper use and the importance of its use. FFA members appeared before home and civic groups, carrying demonstrational kits and showing colored slides. Local machinery and implement dealers were asked to join in the campaign. Enough emblems were ordered to supply each of the 68 chapter members with two emblems, each with a different type of mounting, usually the member kept at least one to show while he took orders for emblems.

The Results

Key farmers and custom operators known to have their equipment on roads quite often, were approached first. Some farmers ordered as many as seven of the emblems the first week. During the period from October 1965, through December 1966, Chapter members had placed 300 SMV emblems in this community. Local dealers, service centers and others who had started carrying emblems in stock estimated they had sold another 100 emblems.

During 1967, the Chapter has placed a total of 50 emblems and we are currently carrying an inventory of four dozen. Promotional circulars are still in use and periodically a news story is released. Pictures of local farmers, displaying this triangular accident preven

The Summer, Iowa, SMV Promotional Program was an integral part of our overall safety program, and set up an exhibit urging drivers to have their automobiles and tractors safety checked.

September, 1967

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Vocational Agriculture Instructors generally agree that farm machinery instruction is an important phase of the Agriculture Mechanics program in Vocational Agriculture; however, many instructional programs do not reflect this importance.

A study6 designed to determine the effect of various factors on the scope of the farm machinery instructional program for high school students and the beginning and adult farmers was initiated at the University of Minnesota.

Method
Questionnaires were submitted to 150 vocational agriculture departments in Minnesota high schools. The data received were tabulated according to the following criteria: single (63) and multiple (28) teacher departments, large (56) and small (53) shops, length of class period, ten common farm machines, and thirty selected tools and supplies considered essential for teaching the ten farm machines.

Findings
The number of teachers in a department influenced the scope of the farm machinery instructional program. A greater percentage of the multiple teacher departments presented instruction on the eight or seven machines in the high school program, and on five of the ten machines in the beginning and adult farmer program than did the instructors in single department.

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**TABLE I. Hours of High School Machinery Instruction in Multiple Teacher Departments.**

The multiple teacher departments used more shop time than the single teacher departments. The multiple teacher departments used 82 percent of the time while the single teacher departments used 73 percent of the time.

The teaching methods used for beginning and adult farmer instruction included the following: lectures, demonstrations, and the use of models andVisual 

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**TABLE II. Hours of High School Machinery Instruction in Single Teacher Department:**

The length of the agriculture mechanics class period affected the scope of the farm machinery instructional program. One hundred percent of the instructors with a two hour class period taught the plow, corn picker, cropper, sprayer, and the grain drill. The plow was taught by 77.1 percent of the beginning and adult farmer classes. The corn picker was taught by 79.1 percent of the beginning and adult farmer classes. The cropper was taught by 70.7 percent of the beginning and adult farmer classes.

**Institutional Period**

The total number of hours spent teaching each machine. When averaging instruction for all the ten machines, 18.8 percent of the period compared to 8.4 percent of those with a single period provided six or more hours of instruction.

**Teaching Method**

A comparison of high school class teaching methods used by instructors with single and double periods did not vary a great extent for the plow, mower, and planter. The high school class instructors with two hour periods gave fewer reading assignments, worksheets and job sheets to their students than did those with the one hour period. Adjustment and service of the machine was the activity most generally performed by the high school students in the shop rather than assembly or repair of the machine.

**Occupational Training**

A number of the vocational agriculture teachers believed they were teaching the students adequately by teaching the farm machinery instruction to qualify them for jobs related to farm machinery. Fifty percent or more of the instructors considered their students were qualified to enter the following occupations: mechanics helper, truck driver for a feed mill, or a farm cooperative, feed mill employee, bulk fertilizers truck driver and farm hardware equipment employee, which represented five of eighteen listed occupations.

**Conclusions**

This study indicated that the departments with the largest shops, more than one instructor, two hour class periods, and the greatest number of tools and supplies were teaching farm machinery a greater number of hours. The significance of shop size should be determined since other factors are dependent upon it.

With the increasing value of farm machinery, the complexity of the machines and the increasing opportunities in agricultural machinery sales, it is important that agriculture instructors are obligated to update their instructional programs and to improve their own understandings and abilities.
Should I Enroll In VO AG??—

Each year you probably find freshman boys that question whether they should enroll in vocational agriculture. They don’t want to farm or they want to take other academic subjects in school which will better prepare them for college.

To help the student make a decision and help him to understand more about vocational agriculture and its importance, I have used an information form which I present to each prospective student when I make a farm call in the spring or summer.

The information form provides an opportunity to sit down with the boy and his parents to explain the agriculture program and opportunities in agriculture. I also emphasize the importance of planning the high school curriculum so that college bound students can meet college entrance requirements and still enroll in agriculture if he is interested. If a boy desires, I help him plan a schedule for grades 9-12. Following is the form which I have found useful.

Donald Borker
Yo Ag Teacher
Red Wing, Minnesota

Vocational Agriculture will help you if:

1. You plan on farming.
   Today it is important to know scientific farming methods and modern farm management. In agriculture you learn how to farm better and live better.

2. You plan on working in some agriculture-related field.
   Some boys who do not have the opportunity to farm, but who have a genuine interest in farming, work in jobs related to agriculture. In agriculture you learn much that will help you as a machinist, dealer, a farm equipment repairman, a land appraiser, a DHIA tester, an elevator manager, or a landscape planner.

3. You plan on attending a college of agriculture.
   If you plan on attending college and have an interest in agriculture, don’t overlook the possibility of attending a college of agriculture. Many jobs in research, industry, business, education, communications, conservation, and other services are available for boys who have a farm background and a college education in agriculture.

This year in Yo Ag more will be placed on

   Today a successful farmer is a scientific farmer. In agriculture you will put biology, mathematics, chemistry, and physics into practice.

2. Farm Management.
   In agriculture you will not only learn how to keep farm records, but also how to use the records and how to analyze the farm business.

3. Job Opportunities in Occupations Related to Agriculture.
   Today there are fewer farmers, but there are more people working in agriculture-related jobs. Of the 28 million people employed in agriculture, only 35,000 are farmers; the rest perform for service farmers, on process or distribute farm products. Over a half million scientists serve agriculture.

In Yo Ag you will also learn

1. Leadership and self confidence.
   Agriculture students conduct parent’s night, hog sale, corn drive for Camp Courage, and parent’s banquet.

2. Responsibility.
   Through judging contests, farm projects, and FFA activities boys develop responsible independence.

3. Cooperation.
   In Yo Ag you learn to work together for mutual benefit. This may involve helping a friend test milk in the lab, selling potatoes at a farm auction, or serving on an FFA committee.

Things to consider

1. You may wish to take Yo Ag as a fifth or sixth subject. You will be required to take at least five subjects in Red Wing this year.

2. You may wish to include several science courses in your schedule, but in some year some may attend college.

You will note that the information form does not contain a section on Farm Mechanics. Farm shop facilities are not provided at Red Wing High School. One paragraph on farm mechanics will be added as shop facilities become available.