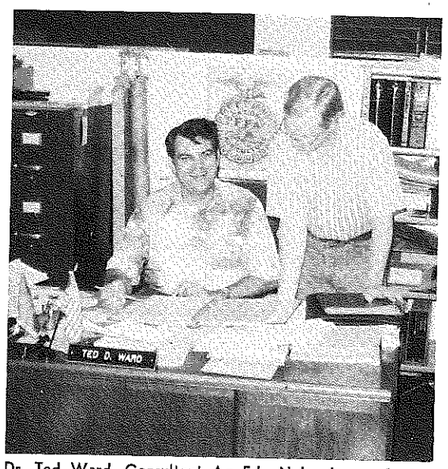
STORIES IN PICTURES

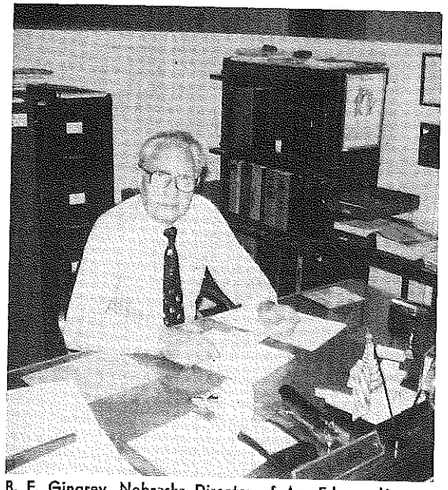
by Joe Sabol

Reviewing American Farmer Candidate's records and applications (L to R) B. E. Gingrey, Duane Chamberlain, Dr. Ted Ward (standing), Dave Howe, and Richard Mills. (Photo courtesy B. E. Gingrey, Dir. of Ag. Ed., Lincoln, Nebraska)

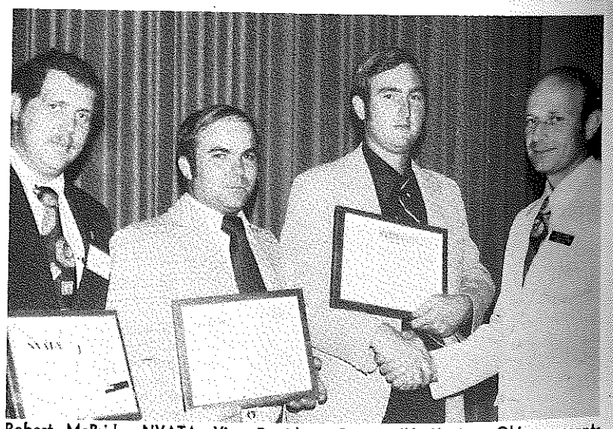


Dr. Ted Ward, Consultant Ag Ed., Nebraska, conferring with fomer state officer Dale Grosback.

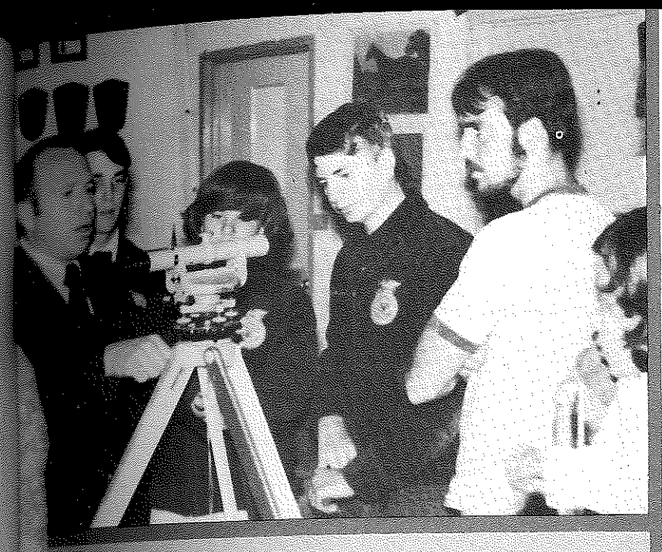
The Oklahoma State Supervisory Staff, Teacher Educators and Officers of the Vo-Ag Teachers Association meet at a retreat to plan the annual conference and jointly solve other problems which may be identified. (Photo Courtesy Larry Shell, FFA Exec. Sec., OK)



B. E. Gingrey, Nebraska Director of Ag. Ed., working on program administration. (Photo courtesy B. E. Gingrey, Dir. of Ag. Ed., Lincoln, Nebraska)



Robert McBride, NVATA, Vice President, Region IV, Kenton, Ohio, presents NVATA awards to Illinois Association Vocational Agriculture Teachers state winners. (L to R) Allen Dietz, Sycamore, IL, "Sound Off For Agriculture"; Michael Nordstrom, Roanoke, IL, "Outstanding Young Member"; John Hatzer, Roanoke, IL "Agribusiness Career Exploration". (Photo courtesy John Fedderson, Asso. Exec. Dir., IAVAT, IL)



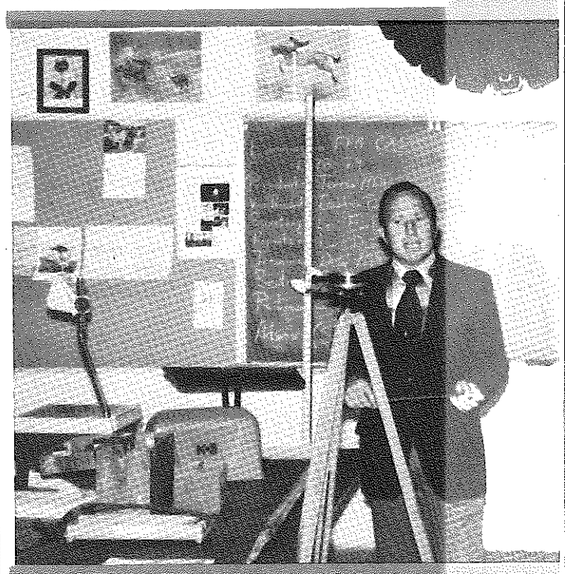
FEATURING —

- CALL TO CONVENTION
- EFFECT OF ATTITUDE
- PRODUCTION SKILLS FOR NON-FARM AG STUDENTS
- LIVESTOCK COOPERATIVES
- DEALERSHIP SIMULATION
- TIPS ON DISCIPLINE
- COMPETENCY BASED APPROACHES

AGRICULTURAL EDUCATION

Volume 51 Number 5

November 1978



Theme—Effective Teaching—What's The Basis?

November 1978 Volume 51 Number 5

AGRICULTURAL EDUCATION

THEME — EFFECTIVE TEACHING
WHAT'S THE BASIS?

COVER PHOTOS

TOP PHOTO— *Gerald Bonds, Vocational Agriculture Teacher at Farmington, NM, moves his students in for some hands-on instruction with the survey instrument.*

CENTER PHOTO— *Mr. Bonds explains some of the principles of surveying using the instruments and other teaching aids (Photos courtesy Paul R. Vaughn, New Mexico State University).*

BOTTOM PHOTO— *Individualized instruction is most effective when the teacher can work directly with his students. Stan Neal is adjusting the welder with Jim Wagner, his student at Sierra Jt. Union High School, Tollhouse, CA (Photo courtesy of Joe Sabol, Cal Poly at San Luis Obispo, CA).*

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—AVA CONVENTION—
Opportunity For Professional Development

"AGRICULTURAL EDUCATION — Serving The Nation Through Professional Improvement" is the theme selected by the committee planning the program for the Agricultural Education Division and the three affiliated organizations to be held during the 1978 AVA Convention, December 2-6, in Dallas. James Christiansen, Chairperson of the Convention Planning Committee, and members of the committee are to be complimented for the interesting and informative program that has been planned. It affords all of us — teachers, supervisors, administrators and teacher educators — ample opportunity to grow professionally through active participation in the program of the Agricultural Education Division, National Vocational Agricultural Teachers Association, the American Association of Teacher Educators in Agriculture and the National Association of Supervisors of Agriculture Education.

The program indicates that formal sessions of the Agricultural Education Division begin on Friday, December 1 with the National Agricultural Education Research Meeting and an evening session on agricultural education in Texas. Special programs for teachers — *The Teacher Weekender* — are planned for Saturday and Sunday, December 2-3. Featured speakers are Reagan Brown, Secretary of Agriculture, State of Texas; Walter Jeske, U.S. Department of Agriculture; and Tony Dechant, President of the National Farmers Union.

Those attending the convention in Dallas will participate directly in the policy and program decision making process for AVA, Agricultural Education Division, NVATA, AATEA and NASAE. I urge those in attendance to participate in the AVA House of Delegates meeting on Wednesday morning, December 6, in the business meeting of the Agricultural Education Division on Tuesday morning, December 5, and the business meetings of NVATA, AATEA and NASAE scheduled throughout the convention. Our professional organizations are what we desire them to be. Each of us has an opportunity to shape these organizations through active and constructive participation during the convention.

Members of the Agricultural Education Division should participate widely and actively in the total AVA Convention program. We grow professionally from activities of the Agricultural Education Division, however, we must participate in other programs and activities during the convention. Our goal should be that of learning from and sharing our ideas with others in vocational education.

The Dallas Convention will be productive if, by our participation, we make it so. See you in Dallas!

. . . J. Robert Warmbrod, Vice-President, AVA, Agricultural Education Division

AGRICULTURAL EDUCATION DIVISION PROGRAM/FUNCTIONS/ACTIVITIES
NOVEMBER 29—DECEMBER 6, 1978—DALLAS, TX

WEDNESDAY, NOVEMBER 29

9:00 a.m. - 12:00 — NVATA Board of Directors Meeting
1:00 - 5:00 p.m. — NVATA Board of Directors Meeting
7:00 - 9:00 p.m. — NVATA Board of Directors Meeting

THURSDAY, NOVEMBER 30

8:30 a.m. - 12:00 — NVATA Board of Directors Meeting
1:00 - 5:00 p.m. — NVATA Board of Directors Meeting

FRIDAY, DECEMBER 1

8:00 - 11:30 a.m. — Agricultural Education Division Policy Committee Meeting
8:30 - 10:00 a.m. — National Agricultural Education Research Meeting
10:15 - 11:45 a.m. — National Agricultural Education Research Meeting
1:00 - 2:30 p.m. — National Agricultural Education Research Meeting
1:00 - 3:00 p.m. — Agricultural Education Division Policy Committee Meeting
2:45-3:45 p.m. — National Agricultural Education Research Meeting
3:30-5:00 p.m. — AATEA Executive Committee Meeting
3:30 - 5:00 p.m. — NASAE Executive Committee Meeting
4:15 - 6:30 p.m. AATEA Journal Editing-Managing Board Meeting
7:00 - 9:00 p.m. — Host State Special Program for Agricultural Education Division
7:00 - 9:00 p.m. — AATEA Executive Committee Meeting
7:00 - 9:00 p.m. — NVATA Resolutions Committee Meeting
9:00 - 10:00 p.m. — Agricultural Education Division Resolutions Committee Meeting
9:00 - 10:00 p.m. — Agricultural Education Division Nominating Committee Meeting

SATURDAY, DECEMBER 2

7:45 - 8:30 a.m. — NVATA Publicity Committee Meeting
8:45 - 10:15 a.m. — Agricultural Education Division General Session
10:30 a.m. - 12:00 — AVA General Session
1:00 - 1:45 p.m. — Weekender Special: "The Invididual Can Be Effective . . . Legislatively"
2:00 - 3:15 p.m. — Joint AATEA-NASAE General Session
2:00 - 3:15 p.m. — NVATA General Session
3:30 - 5:00 p.m. — NVATA Regional Meetings
3:30 - 5:30 p.m. — AATEA Business Meeting
3:30 - 5:30 p.m. — NASAE Business Meeting
6:00 - 10:00 p.m. — Agricultural Education Magazine Editing-Managing Board Dinner and Business Meeting
7:00 - 10:00 p.m. — Agricultural Education Division Nominating Committee Meeting
8:00 - 10:00 p.m. — NVATA Resolutions Committee Meeting

SUNDAY, DECEMBER 3

7:00 - 8:30 a.m. — NVATA Breakfast for Agricultural Educators and Spouses
9:00 - 9:45 a.m. — AVA Religious Service
10:15 - 11:30 a.m. — NVATA General Session
10:15 - 11:30 a.m. — Administration of Agricultural Teacher Education Departments
1:00 - 2:45 p.m.—Weekender Special: "NVATA Award Winner/Panel Presentation"
3:15 - 5:00 p.m. — AATEA General Meeting
3:15 - 5:00 p.m. — NASAE General Meeting
3:15 - 5:00 p.m. — NVATA Regional Meetings
5:00 - 7:00 p.m. — AVA President's Reception
7:00 - 9:00 p.m. — NVATA State President's Dinner
9:00 - 11:00 p.m. — NVATA Resolutions Committee Meeting

MONDAY, DECEMBER 4

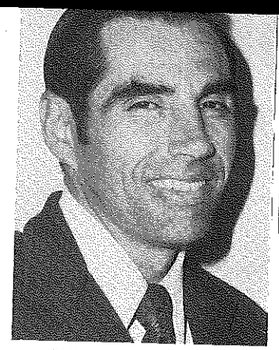
7:00 - 8:30 a.m. — NVATA Breakfast for Agricultural Educators and Spouses
8:30 - 9:00 a.m. — Agricultural Education Division Resolutions Committee Meeting
9:00 - 11:30 a.m. — AVA Regional Business Meetings
1:15 - 3:15 p.m. — Agricultural Education Division General Session
3:30 - 5:30 p.m. — Agricultural Education Division Standing Committee Meetings
6:30 - 8:00 p.m. — NVATA Past Officers' Dinner and Meeting
7:00 - .... p.m. — AVA Theme Sessions

TUESDAY, DECEMBER 5

7:00 - 9:30 a.m. — AATEA Breakfast and Business Meeting
7:00-9:30 a.m. — NASAE Breakfast and Business Meeting
7:30 - 9:30 a.m. — NVATA Awards Breakfast
9:50 - 11:50 a.m. — Agricultural Education Division Business Meeting
1:00 - 2:30 p.m. — AATEA Executive Committee Meeting
1:00 - 2:30 p.m. — NVATA General Business Session
1:00 - 2:30 p.m. — NASAE Business Meeting
3:00 - 5:00 p.m. — Agricultural Education Division Policy Committee Meeting
5:00 - 5:45 p.m. — Final Meeting 1977-78 NVATA Board of Directors Meeting
6:00 - 7:00 p.m. — First Meeting 1978-79 Board of Directors Meeting
8:00 - .... p.m. — AVA Entertainment/SHIP Program

WEDNESDAY, DECEMBER 6

9:00 a.m. - 12:00—AVA Assembly of Delegates



James P. Key

FROM YOUR EDITOR

EFFECTIVE— FOR WHAT?

When we begin to discuss the basis of effective teaching, immediately the question is raised, "Effective for what?" If you will tell me what the goals and objectives are the teaching is attempting to accomplish, then perhaps I can tell you if the teaching is effective and even venture suggestions for improving its effectiveness. I'm not sure we all agree on the goals and objectives for our vocational agriculture/agribusiness programs.

CONFLICTING GOALS?

I hear some of us saying our overall goals and objectives should be to develop the total individual, with good general agricultural skills, a broad background of agricultural knowledge and a strong appreciation of agriculture as a way of life. On the other hand I hear some of us saying our overall goals and objectives should be to develop a competent worker, with specific agricultural skills and knowledge for a very specific agricultural occupation and strong desire to enter that specific occupation.

If you say these two overall goals are mutually incompatible, I would have to agree—for a single program. However, both goals are highly laudable and can be defended with many different arguments, from laws to needs of the community. How then do we resolve the conflict? The goals of your program, in my opinion, should be to set by you, the teacher(s), in consultation with your advisory committee, administration, and state staff, keeping in mind federal guidelines and national standards. The most emphasis should probably be put on the specific needs of the students in your classes and of the community your program serves.

A COMBINATION APPROACH?

I tend to support a combination of the specific competency approach and the total individual approach. In education the pendulum tends to swing from one extreme to the other. For example, it has swung from no recognition of exceptional students, to isolated grouping, back to mainstreaming; and from the basics of reading, writing and arithmetic, to a widely diversified curriculum, and back to the basics. Therefore, I feel the combination approach is more realistic than either extreme. I can recall some of the "old timers" in vo-ag talking about teaching students working in agri-businesses and agricultural occupations other than farming when they had to hide it because the guidelines called only for preparation for farming. In setting the goals and objectives for our local programs, I would hope we would not "throw out the baby with the bath water." Sure, let's make our preparation for agricultural occupations more specific where possible, while at the same time keeping in mind the number of times the average worker changes jobs. We must also keep in mind that we are preparing students to enter whatever agricultural occupation they enter with the attitude that they will work hard, do their best, and keep learning new competencies and skills as long as they are in that occupation. Many employers have said these attitudes are the most important things we can teach a student who might be their future employee. So, if we attempt to arrive at the best combination of these approaches based on our student and community needs, we should come up with sound goals and objectives.

Once the goals and objectives are decided, then we can get down to the business of determining and improving the effectiveness of our instruction. Therefore, I would contend that a set of well thought out goals and objectives, stated in specific terms which will help us determine when they are accomplished, is a most valuable basis for effective instruction.—*Ed.*

(Please submit articles 2½ months in advance of Theme to allow publication time.)

COMING ISSUES COMING ISSUES COMING ISSUES

COMING ISSUES

DECEMBER — Professionalism—That's The Name of the Game

JANUARY — Golden Anniversary Issue — Looking to the Past and the Future

FEBRUARY — FFA — A Valuable Resource For the Agriculture Teacher

MARCH — Classroom Instruction — Getting the Ideas Across

APRIL — Supervised Experience—Doing to Learn — Learning To Do

MAY — Agricultural Mechanics — Developing Important Skills

JUNE — Summer Opportunities — Supervision, Planning, In-Service Education, Conferences, Repairs, Other Activities?

JULY — International Agricultural Education — Filling the World's Breadbasket

AUGUST — The Overworked Ag Teacher — Determining Priorities

SEPTEMBER — A New School Year — Opportunities Unlimited

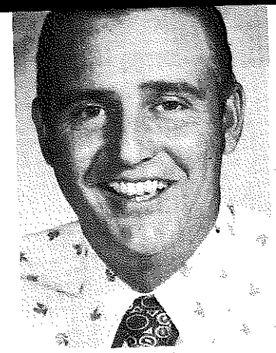
OCTOBER — Our Grassroots Community Relations — Parents, Advisory Committee, Administration, Legislators

NOVEMBER — Adult Education in Agriculture — An Extension of Our Vo-Ag Program

COMING ISSUES

EFFECTIVE TEACHING? MANY BASES!

by
Sidney J. Long
Vocational Agriculture Teacher
Robert Lee, TX



Sidney J. Long

Effective teaching is efficiently imparting usable knowledge to a student. Anyone can teach, but not all are effective. Effectiveness is attained by constantly striving to enhance teaching methods. It is a combination of teacher traits that must be developed. The degree of development is dependent upon the individual, his or her desires, talents, and devotion. Effectiveness is similar to maturity in that it can continue to improve throughout life or it can stop at any given time. Teaching experience should improve effectiveness; however, many times it is exchanged for a "Status Quo" attitude that actually deteriorates effectiveness.

ENJOYMENT

To be an effective teacher, one must enjoy the teaching process. If you cannot gain satisfaction from seeing your students develop, you need to take another look at your vocation. Sure, you have disappointments and become discouraged at times, but these are quickly forgotten when one of "your" boys or girls achieves some measure of success. Haven't you been thrilled by that "poor" student in academics that surpassed all other students in some vocational skill, even if it required three or four years to find that "one thing" that he or she could be "tops" in? Granted, teaching is not the best paid job, but the satisfaction of being a part of a student's growth can be one of the most rewarding professions in our times. Enjoyment in teaching, therefore, has to be one of the first bases of effective teaching.

VARIETY

Learning is similar to eating, in that the method of preparing the food creates an appetite. The same fried food each day soon becomes distasteful. To lecture the same way each day, throughout the year becomes dull and uninteresting. Effective teaching means to use the most desirable method available to convey knowledge to your students. The old saying, "variety is the spice of life," may hold some truth when applied to teaching methods. Some subjects are better taught by lecture, some by films, slides, overhead, hands-on, individualized, groups, and/or a combination of these. The use of advanced students to assist slower learners is sometimes an effective teaching aid.

INDIVIDUAL NEEDS

Have you ever had two students exactly alike? If the answer is no, then you probably realize that each student has his or her own set of needs. These needs may be due to mental ability, home environment, sex, color, moral standards, attitude, desires, and physical ability. In order to get the same subject matter over to a group of students, you may have to present the material in different ways to make the material digestable for each student. Isn't it better to try and recognize individual needs and plan on using the most effective methods of teaching to meet these needs? Recognition of individual student needs puts the effective teacher on a one-to-one relationship with each member of the class, and the time and concern you show for each student will be rewarded by generating a faster and more effective learning process. Sometimes a word of praise and sincere recognition of progress will be the key ingredient necessary to ignite the learning fire in a student. Some students need to be challenged, others need to think that the teacher doubts their ability. Each is different. Each has different stimuli for learning. We must find the right start button to push and then be sure that there is enough fuel to complete the job.

PREPARATION

An effective teacher is always prepared for the day's schedule. He also always has an alternative teaching plan arranged for unplanned situations. Those unplanned situations sometimes lead to discipline problems. Keep the students busy, because a busy student is a learning student. The key to successful teaching is careful preparation, keeping the student interested in the subject, and keeping them busy working on their assignment.

ATTITUDE

Another important factor for effective teaching is student attitude toward each other, the teacher, and the material being taught. The ideal situation has the teacher bestowing knowledge of a subject that is interesting to the student in a classroom where all students are comfortable with each other. Unfortunately this does not exist all of the time. Teachers must motivate the student toward a learning atmosphere. This includes discipline, variety of teaching methods, class participation, and thought stimulation. When the students' attitude is geared toward learning, an effective teaching situation is accomplished. Interest may be created by employing any or all of the known teaching methods and aids available to the teacher.

DISCIPLINE

Effective teaching is also based upon proper discipline. A teacher must maintain discipline within his or her own class, and not leave discipline up to the principal. Certainly there are forms of discipline that require assistance from administrators; however, most common problems should be

(Concluded on page 102)

solved by the teacher. So you can't use the board! There are just as many effective alternates available, if thought is applied to the situation. If you can adjust your discipline of that student to the area of work he likes, as a penalty for his misconduct, then you may have found one of the most effective forms of discipline available. Other forms of discipline include cleaning of the shop, classroom, writing reports, point cutting, and suspension from teams. A trip to the principal's office is the last resort and every effort possible should be exerted before that situation occurs. Without discipline, there can be no learning; and without learning, there can be no effective teaching. Discipline is not always the perfectly quiet classroom; but rather a controlled classroom, where students and teacher have mutual respect for each other and learning occurs. Students have the right of their opinion and to express it in a respectful manner. A student should know what is expected of him. This should be clear cut and the student should know that rules are for everyone and that disrespect for a rule will lead to disciplinary action. Set your rules, inform the students, and stick to your guns. Never, however, set the disciplinary action up in advance unless you are prepared to carry it out to each and every student. In my opinion, effective discipline is different for each respective student. Very rarely are two students exactly alike.

RESPECT

Respect is a very sought after commodity by all teachers. Respect is grown similar to a crop. It must be planted, watered, fertilized, cultivated, and finally harvested. Trust, faith, and a lack of the so-called "know everything attitude" are important ingredients in obtaining respect from your students. True respect is based upon honesty, self discipline, moral character, and a sincere interest in your students. These attributes will produce long lasting respect. Some teachers feel that to admit to a student that you do not know the answer to a question results in a loss of respect from that student. This is not the case, as there is no way possible for one man to know all the answers to everything. To give a questionable answer to save face rather than admitting your lack of knowledge will eventually spell defeat for the teacher in the eyes of the student. A teacher should be able to admit a lack of knowledge, mistakes, and poor judgment occasionally, as long as these are presented with better ideas, more information, and a sincere desire to better one's self. It oftentimes requires several years to gain the confidence of all your students. This is one reason why effective teaching does not occur instantaneously. Constant diligence is required by the master teacher to acquire this important characteristic so essential for effective teaching.

To gain respect from the students, you must first learn to respect the student. You must exhibit the type of attitude, moral character, honesty, self confidence, faith and interest that you expect from the student. In gaining respect, remember that you are the teacher, not one of the students. Keep things at your level, do not let them bring you to their level. Students must be treated fairly and certainly start each day on a new basis. Grudges toward a student by the teacher must be removed. If a mistake is made, correct it and start fresh the next day. Practice what you preach. The old saying, "Do as I say, not as I do," should never apply to the effective teacher. This type of respect, of caring, was established for us by the master teacher, Jesus Christ. His total caring for people is an attitude that we must strive to develop for our students. We must be dedicated, in that, we love our job, believe in what we are doing, sincerely care for our students, and live our lives as an example for our students.

IN SUMMARY

After considering the pre-mentioned characteristics that play a role in effective teaching, one should realize that there are many other factors to consider. Each teacher has certain individual aids that enhance the learning process. Each has to develop his own abilities to accomplish the goal desired. Each is better at some than others. The overall picture is geared to stimulate new ideas and methods and not be intimidated or be afraid to try them. If everyone believed that we already know all the answers about teaching, then our profession would be dead. Each of us must continue to improve and to let others know of our ideas and methods. The pioneering spirit in education must continue to exist as we constantly try to improve our teaching effectiveness. When we have exhausted our reserve of ideas and methods, and our initiative to think and create are completed, then we probably will be quickly replaced by computers. May we, as teachers, continue to use the never ending resources that were given to us by God, to impart knowledge more effectively as time progresses, and to sincerely love and care for our students. ◆◆◆

FEED FORMULATION MANUAL, by T. B. Keith and John P. Baker. Danville, Illinois: The Interstate Printers and Publishers, Inc., 1976, Second Edition, 93 pages. $2.50.

This paperback manual is designed to aid students and individuals in the study of ration formulation and livestock nutrition. Various problem exercises concerning nutrition terms, and the application of basic principles of livestock feeding are included. The exercises can be easily torn out for individual grading assignments if the instructor so desires.

Nine literature references are suggested for use in solving the problem exercises. However, most departments should already possess many of the references so the cost of such should not prevent one from considering the use of this manual.

The following phases of applied nutrition are covered in the manual:

1. Values obtained from the proximate chemical analysis.
2. Data from experiments designed to evaluate a feedstuff, nutrient, or ration.
3. Feeding guides for evaluating the contribution of a feed or ration in promoting the optimum efficiency of performance of the animal being fed.

The manual contains 35 problems in feed formulation including such topics as chemical composition, digestibility, maintenance and feed requirements, costs and returns, vitamin measurements and calculations, and developing rations for beef cattle, horses, sheep, and swine. Eleven reference tables are provided to aid in working the exercises.

Answer sheets for the manual are available from the publisher for 50 cents each or are free when ordering 10 or more copies of the manual. This may save the teacher much time and add learning reinforcement for the student.

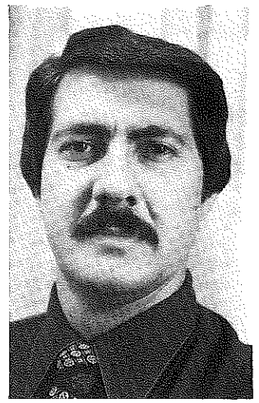
The authors are from the University of Idaho and University of Kentucky, respectively, thus lending geographical variety to the manual's exercises.

The manual should prove useful to advanced high school students or to junior and senior college students involved in ration formulation studies at the introductory level. Teachers may find it useful as a personal reference or text for basic ration formulation.

William H. Adams, Jr.
Davidson County Community College
Lexington, N.C.

DON'T TEACH – MIND MULCH!

by
Maurice P. Hartley
Director of Cooperative Education
Rutgers—The State University of New Jersey
New Brunswick, NJ



Maurice P. Hartley

Webster's *New World Dictionary* defines mulch as leaves, straw, peat moss, and so on, spread on the ground around plants to prevent evaporation of water from soil, freezing of roots, and retard the growth of weeds. We have all been reminded at one time or another that we do not teach agriculture, animal science, math or history; we teach students! Let's take that notion one step further and entertain the possibility that we do not teach at all.

In a very real sense, the horticulturalist does not grow plants. Seeds or cuttings available are placed in an environment where their potentials for growth may be effectively and efficiently realized. Perhaps, in an analogous manner, the most we as teachers can hope to do is to create an environment that is conducive to learning: mind mulch, don't teach!

In no way does this idea diminish the role and responsibility of the educator. On the contrary. It encourages us to examine with renewed vigor the basis of effective teaching. I believe that teaching is not only one of the most important of the professions from the standpoint of human welfare; it is also, when properly understood, one of the most technical and difficult.

Everyone expects the farmer, the large commercial farmer in particular, to know and apply the basic principles of agriculture: planting, cultivation, pest control, crop rotation, erosion control, and so on. We have come to expect such practices because we realize that insufficient knowledge and delivery in these areas results in the loss of money, property, and essential foods for a hungry world.

Fewer people seem to realize, however, the extent to which superficial knowledge of human growth and learning, applied in classrooms from day to day, results in lost opportunities, wasted potentials, warped personalities, discouragement and failure. We expect the surgeon to know anatomy and physiology because human lives depend on it. We expect conservation experts to apply principles of preservation, development, and natural resource management because human lives depend on it. Obviously we should demand no less of ourselves as educators entrusted with the lives of young men and women. I consider it of value, therefore, to review briefly a number of the principles which I believe the effective teacher applies in the development of our human resources.

PRINCIPLES OF LEARNING

Learning theorists Dollard and Miller argue that in order for learning to occur, four elements must be present: 1) the student must want something; 2) the student must notice something; 3) the student must do something; and, 4) the student must get something. To me this means that the effective teacher begins with what the student wants to get out of the experience.

We have witnessed the young graduate eagerly enter the classroom enthusiastically determined to teach agronomy, dendrology, or a multitude of other subjects only to exit in discouragement because they failed to motivate their students. No one will deny the value of enthusiasm, but I submit that the basis of effective teaching is not to be found in our ability to motivate others.

THE EFFECTIVE TEACHER

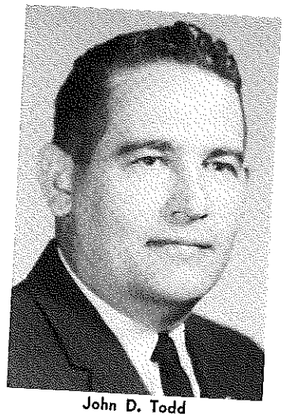
Students are living, dynamic, vital beings. As such, they are already motivated. In Dollard's and Miller's terms, they already *want* something. The successful and effective teachers that I know take full advantage of this very basic fact of life. Intuitively or otherwise, they key in on the level and the direction of the student's motivation. They understand what the student wants and plan lessons accordingly.

Effective teachers remember that growth and learning are continuous, though the rate will vary from student to student. They adjust assignments to the student's level of maturity. Furthermore, they structure activities that permit one to perform relevant lifelike tasks through which some personal gain may be realized.

For many years learning was regarded as identical with knowing. Certainly the acquisition of knowledge and skills is involved, but that alone is not enough. A more recent and increasingly accepted view is that learning is the modification of behavior that comes through interaction with the environment. Thus, the effectiveness of a teacher may be measured not so much by what the student knows, but in terms of what the student does with what is known.

The beginner bee keeper, through experience, learns that bees make honey for bees, not people. Over extraction results in a starving hive; less is taken the next year. The novice home gardener finds that too much nitrogen fertilizer, improperly applied, results in as much crop loss as too little. More care is taken thereafter.

Many individuals, sincerely desiring to be good teachers, deliver well organized lectures week after week only to learn through poor class discipline, absenteesim, and low test scores that disemination of information is not teaching. Others, applying the principles of learning and human ecology outlined above, create an environment conducive to growth, skillfully manipulate a variety of educational tools, plant seeds for thought, cultivate active participation, mind mulch, and reap a bountiful harvest. ◆◆◆



John D. Todd

IMPROVING TEACHING

by
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Teaching vocational agriculture involves many tasks. One of these tasks is directing the learning process of students. This is a task that is common to all teachers. The essence of being a teacher requires that some effort be expended in directing the process of learning among students. This involves much more than making routine classroom presentations according to the stereotyped role of a teacher. The process of learning among vocational agriculture students extends beyond the classroom, and involves many activities which challenge the best efforts of those committed to teaching. To facilitate effective programs of vocational agriculture, it is imperative that some thought be given to improving teaching performance.

What is involved in improving teaching performance? The first step would be to analyze the process of teaching to determine the tasks involved. After this analysis has been made, the next step would be to consider ways for making improvements in the different identified tasks that are appropriate and justifiable according to existing situations. The selected changes should then be implemented with the anticipation of improving teaching performance. Later, these changes should be given reconsideration for adoption or modification for further improvement. Making improvements to teaching performance by this procedure would be a process, not an event. Teaching performance would be continually subjected to evaluations resulting in subsequent changes.

For the purpose of improving teaching performance, tasks and suggestions for carrying out those tasks with vocational agriculture students have been identified. These tasks and suggestions follow:

1. BECOME ACQUAINTED WITH STUDENTS BEING TAUGHT. This has often been described as "knowing the situation." Teachers should know the background, learning abilities and prior experiences of the students to be taught. A knowledge of this information will expedite the planning process for teaching and the selection of learning activities necessary to bring about the desired changes in students' attitude, behavior, and performance. Some of this information could be obtained as vocational agriculture teachers perform the task of supervising the occupational experience programs of their students.

2. PLAN FOR TEACHING. Very few teachers can perform effectively in a teaching situation without prior planning. Such a plan should include the necessary components needed by teachers in directing the learning process. The components for a usable plan will vary among teachers but most plans should contain objectives, learning activities and the teaching materials that will be used during teaching the identified job, unit or competency. Standardized teaching plans have utility, but most plans must be adapted to local situations and should be modified and updated if used for succeeding years or classes.

3. DETERMINE OBJECTIVES. Even though determining objectives is part of the planning process, it is a crucial task that must be performed if effective teaching is to be accomplished. There are many ways for stating objectives but the most useful form is to express them in terms which identify both the kind of behavior to be developed in the student and the content or area of life in which this behavior is to operate. Stating objectives in this manner has been described as using "performance terms." Such objectives help teachers in identifying the changes in behavior that are being sought from the learning process. They will also be of value in selecting learning activities and eventually in evaluating the results from teaching.

4. SELECT LEARNING ACTIVITIES. Once the objectives have been determined, appropriate learning activities must be selected. Several factors will influence the selection of learning activities. Foremost of these is the desired performance of the learners as identified in the objectives. Other factors will be the available resources and facilities for teaching coupled with the background and competence of the learners.

Not all of the learning activities should be performed in the classroom or school laboratory. Neither should they be conducted primarily by a teacher-centered approach but should include student-centered activities that are relevant to the situation. This should not be interpreted to mean that the teacher will not have an important function in the learning process. The teacher should play a dominant role in selecting, planning, directing and evaluating the learning activities. The effectiveness of these learning activities in motivating and sustaining learning will be greatly determined by the teacher's imagination, ingenuity and knowledge of the learning process.

There are many activities appropriate for learning among vocational agriculture students. Teacher presentations, classroom discussions, supervised study, demonstrations, individualized and small group study, activities performed in shops and other school laboratories, field trips, and the use of resource persons are examples of learning activities that are often recognized as components of an organized instructional program. Others that should be given equal recognition would be learning activities that result from supervised agricultural experience programs and participation in Future Farmers of America functions.

5. DIRECT THE LEARNING PROCESS. This is one activity uniquely inherent with the teacher or director of the learning process. It takes place after the learning activities have been planned and is often referred to as "teaching the class." If used in this context, it is a misnomer since the learning process involves some activities not usually considered part of an orga-

(Concluded on the next page)

EFFECTING DESIRED CHANGES

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CONTINUED *IMPROVING TEACHING*

nized instructional program.

It is the responsibility of the person who directs this learning process to select and use the most appropriate and effective methods and techniques to stimulate learning. Rapport must be developed and maintained with students. To maximize learning in some situations, resources must be utilized that extend beyond the classroom. To accomplish these conditions for learning, a vocational teacher must use the knowledge and skills acquired through teacher preparation and further developed and refined through years of teaching experiences and supplemented with occupational expertise in the field of agriculture.

6. EVALUATE THE RESULTS. This is the final stage and often the most neglected one in the teaching process. In many cases, the only form of evaluation used is a written or performance test with a "grade" given to the learner indicating the degree of mastery of the subject content or development of a skill. Such an evaluation does not assess the value of all facets of learning. To what extent did the students put into practice the knowledge and skills learned? How well did they perform when later placed in an actual situation? What was the employment or success record of those taught at two, five, or ten year intervals after entering the world of work. These are concerns which should also be considered when evaluating the results from teaching.

Not only should the results of the learning process be evaluated, but an evaluation should be made of the adequacy and appropriateness of the facilities and resources used in teaching. The purpose of evaluating these components would be to bring about changes and modifications for improving conditions contributing to a more effective learning process.

CONCLUSION

The identified tasks are necessary for effectively directing the learning process among vocational agriculture students. Suggestions given for performing these tasks warrant careful consideration for improving teaching performance. Some of the suggestions may need modifying before being adaptable to certain situations. Improvement in teaching performance should be a priority for each vocational agriculture teacher. The results will be manifested in the quality of performance of those entering the world of work in the field of agriculture. This should be sufficient reason to motivate each vocational agriculture teacher to make the necessary changes for improving teaching performance. ◆◆◆

Educators in the field of agricultural education are concerned that students in the vocational agriculture curriculum be subject to effective teaching. Effective teaching is the directing of learning activities in such a way that desired changes occur. The vocational agriculture teacher, as director of the learning activities, is largely responsible for effective teaching. It is important then that a determination be made of some of the factors and traits which contribute to the role of an effective teacher. In discussions with state directors of vocational agriculture, area supervisors of vocational agriculture, and instructors of teacher-trainer institutions, a number of factors seemed to surface as being basic to successful teaching.

PREPARATION

The successful, effective, teacher needs adequate pre-service preparation in the areas of instruction included in the vocational agriculture curriculum. In-service courses expand and up-date information in this area. On-the-job preparation is an important factor to be considered. As teachers realize their role in directing learning, they become selective as to priorities in material to be presented. A properly planned teaching schedule with calendar is necessary to assist in maintaining these priorities. Adequate lesson plans with appropriate aids, references, and student activities should be prepared for each lesson taught. In the vocational agriculture curriculum there are several areas of learning activities — classroom, S.O.E., FFA, agricultural shop, greenhouse, etc. A proper balance should be maintained and a constant evaluation should be made to assure that balance.

COMMUNICATION

From observations of teachers, it is apparent that some individuals possessing the best of preparation still are ineffective teachers. One reason for this is that there is no communication between the student and the teacher. Communication is both verbal and nonverbal, it is listening as well as speaking, it is the transfer of ideas and attitudes between student and teacher. Students react positively to teachers who exhibit sincerity and enthusiasm about what they are teaching. Student success is enhanced by the expectations that a teacher subtly conveys to the class in conversation and mannerisms as surely as by written objectives. There is no set of rules to follow whereby communication will be achieved. Each teacher must be critical of his or her approach and attitude in achieving the desired response toward learning from the students.

MOTIVATION

Motivation of students cannot be overlooked if desired learning is to take place. Desirable motivation is an openness to new ideas. Effective teachers help create this openness within the students. Every student will not be highly motivated in every area of instruction. A well-integrated and balanced program of instruction will help open new avenues of interest and concern for most students.

INDIVIDUAL SUCCESS

A successful teacher is able to effectively work with students, parents, other teachers, administrators and community leaders. However, to evaluate the effectiveness of his or her teaching, the teacher must consider the individual student. Has the teaching directed the learning of each student so that desired changes have been achieved? Has each student felt some measure of success in achieving goals? Has the student been able to set challenges to be met on a continuing basis? As a teacher evaluates the learning that has taken place in the students, the teacher is forced to evaluate the effectiveness of his or her teaching. A critical, honest evaluation can help any teacher become a better, more effective teacher. ◆◆◆

IS YOUR ATTITUDE SHOWING?

by
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Recently, an article was brought to my attention by a staff member at the University of Nebraska School of Technical Agriculture, Curtis, Nebraska. The article, printed in the *Journal of Animal Science* (Vol. 44, No. 5, 1977) was written by John R. Campbell, University of Missouri-Columbia, and is called "Motivating Students." It made me reflect on some of my experiences and how I have been motivated by people in my life.

I have reached the conclusion that we are more a product of the people who have touched our lives than we are the creation of our own efforts. In short, their attitudes have affected us.

With nearly eleven years teaching experience at the secondary and post-secondary levels, I have to feel that "attitude" made the difference in my being a good teacher rather than a mediocre one. And when I say "attitude," I include not only my own but also that of the people in my life.

My high school vocational agriculture instructor took a personal interest in me; he encouraged me and he challenged me. Under his direction, I competed in the State Creed Speaking and Public Speaking Contests, served as Chapter President, attended three National FFA Conventions, and attained the State Farmer Degree. And yes, because of him, I, too, became a teacher of vocational agriculture.

"A survey of National Merit Scholars showed that the teacher traits they cherished most was personal interest. Students like teachers who like students. It is difficult to not think highly of someone who thinks highly of you."

"The philosophy displayed by teachers is quickly detected by students. And when the teacher's philosophy is one of personal trust, sincerity, fairness and interest, it usually has a great motivational effect on students."*

THE TROUBLE MAKERS

In one of my early years of teaching, I had three students in my class who were identified ahead of time for me by the other teachers as "troublemakers," "no goods," "failures." A few days of class almost had me convinced the description was quite fitting. But then an odd thing happened. I asked if anyone wanted to go to North Platte to the Grasslands Livestock Judging Contest —there were no volunteers until one of the "troublesome threesome" raised his hand with a grin on his face and said "How about us?" I know I surprised both the class and myself when I said, "Sure, as long as you'll practice judging a couple evenings and a Saturday or two." To make a long story short, they accepted, got up at 4:00 a.m. for the trip, judged in the contest (oral reasons and all) and placed high enough to bring home a ribbon. Never again did any problems occur in class. I had taken a personal interest in them—the first anyone had for a long time—and it changed their lives.

"There is a direct correlation between an instructor's attitude toward a subject and that of his or her students. A favorable teacher attitude is reflected in a favorable student attitude and vice versa."

"A Harvard psychologist, Robert Rosenthal, conducted experiments to demonstrate how attitude affects outcome."

"In one study, Rosenthal administered special learning ability tests to students of grades K-5. Using information obtained, the following September he gave teachers the names of six pupils who had been identified as 'spurters,' those who possessed exceptional learning ability. What the teachers DID NOT KNOW was that names were selected at random before the tests were administered. Thus, differences between the 'chosen few' and the others existed only in the minds of teachers."

"After one full school year, the same tests were given and the results revealed that the 'spurters' had indeed excelled, and their I.Q. scores soared 15 to 27 points above the less fortunate. Teachers noted that the 'spurters' were happier than the other children, more curious, more affectionate and were more likely to be successful in later life. Again, the only difference was one of attitude. Because the teachers had been led to expect more of certain students, those pupils came to expect more of themselves and they delivered. Their teachers bolstered their self-confidence, and when people think they can achieve, THEY DO!"

What do you expect of students? Most likely you expect different things of different students—but what if you expected only the best and they knew of your expectations. Think of the powerful influence this could have on their lives. On the other hand, what if you expected the worst? That's a powerful influence, too, but unfortunately a very negative one.

"There is an amazing potential in most students to do better than they are doing, even more than they themselves ever believed possible. I have discovered in dealing with students that the more you expect of them, the more you will get. Remind your students that opportunities multiply when seized, but decrease when neglected."

A freshman boy in one of my classes left me no alternative but to turn him over my knee and paddle him. That got his attention and he listened to what was said to his class about the potential I felt it possessed. As a senior, that same boy was named Star Farmer of Nebraska—the highest honor a State FFA Association can confer upon one of its members.

Robert Bierstedt sums it up best with these words: "I am not what I think I am, and I am not what you think I am, I am what I THINK YOU THINK I am."

You may never know all the effects you have had on people who pass through your program, but believe me, you do have an effect. Your attitude *is* showing and it may motivate, create, and challenge — or it may wound, hurt, and destroy. As an educator you are afforded the opportunity to affect more lives than you could in any other profession. In what way you affect them depends largely upon your attitude. Make it an attitude of which to be proud. ◆◆◆

*All direct quotes come from Campbell's article.

APPLICATION—BASIS FOR EFFECTIVENESS!

by
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Effective teaching depends on many factors, many of which are found in the following formula:

$P_1 + P_2 + P_3(A_1) + E_1(R_1) =$ Effective Teaching

The above formula is an adaptation of a formula used by Harold Crawford at Iowa State University.

The formula should be interpreted as follows: thorough planning, plus complete preparation, added to creative presentation, laced with an abundance of application, followed by critical evaluation, coupled with revision based on evaluation, will yield effective teaching.

Student control, teacher personality, teacher experiential background, and many other factors are important to effective teaching and are not included in this formula. For the purpose of this article, however, one factor in the formula will be expanded: application.

All teachers concern themselves with the "what" of teaching. Frequently the "how" of teaching is considered by teachers. Rarely, however, is attention given to the "why" of teaching, or to application.

Application should address:

—Why should a student know what you are teaching?

—What advantage will there be to the student to learn the information presented?

—How is the information being taught important to the student right now?

Good teachers will answer those questions for students sometime during the lesson.

If the knowledge and skills being taught cannot be applied to meeting students' current and/or future needs, don't bother teaching it! This is a philosophical statement which has merit if one is truly a "vocational" educator.

There are ample number of science courses which are taught for science's sake, or math courses which are taught for the "inherent beauty of mathematics"; agriculture should not be taught as a "pure" science. Agriculture is not, and never was, a "pure" science. The use of scientific information is essential to agriculture, but only in as much as agriculture can apply the science to the solving of problems with which it is confronted.

EXAMPLES

Following are four examples which illustrate how application can be brought into teaching by vocational agriculture teachers.

Why should students learn nutrition if they never have an opportunity to reduce livestock production costs by formulating their own ration using feed stuffs which are available on their own farms? If, in fact, they cannot reduce feed costs by growing their own feed crops and formulating their own rations, they should have the opportunity to work through that calculation and draw the conclusion themselves. The students must be allowed to solve their own problems. The vocational agriculture teacher will not always be present to help with decisions.

Proper use of the various problem-solving methods of teaching will inherently provide application. The topic of concern in this article is not the problem method, however, it is application. Application must be present regardless of the method of teaching selected.

It is fruitless for a teacher educator to exhort vocational agriculture teachers to provide application in their lessons without providing application themselves. A second example for application: Why should plant anatomy and physiology be taught if crop production is never taught? Frequently instruction in crops reverts to a science course in plant morphology, taught the same way crops courses are taught at universities. The latter type of instruction has little or no apparent value to a high school student interested in making a buck growing peppermint.

A third and related example would concern the teaching of crop production and failure to teach about that machinery which is important in the production of the crops in question. Vocational agriculture teachers should teach students how to make the adjustments necessary for proper operation of the equipment used for crop production. Students should be able to make field adjustments to improve the cleaning of seed, increase or decrease clearances of cylinders in accordance with the type of crop, etc. No matter the equipment size—forage harvester, combine, or raspberry picker—the machine should be brought to school for detailed instruction and then field adjustments should be performed by students.

Vocational agriculture teachers should utilize the events which occur during supervised occupational experience supervision and FFA activities as a means to bring application to their teaching. This is an area too frequently overlooked by teachers for bringing application to their lessons.

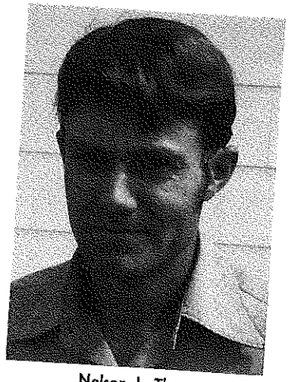
If a student is raising sheep in inadequate facilities, work with the student to develop a problem format which the student and the teacher can share with the vocational agriculture class to identify good production practices. Get the class to specify minimum qualifications which must be met by the facility in order to be an economically feasible operation.

There are innumerable ways to bring application into the lessons of vocational agriculture teachers. It is hoped that the four examples provided in this article will be useful and stimulate additional ideas about application and its place in effective teaching.

TO SUMMARIZE

The answers to the three questions posed at the beginning of this article are inherent in the examples cited above. As one incorporates application into lessons, and subsequent teaching becomes more effective, fewer problems will arise with student control and student-initiated problems which consume a teacher's classroom time. Learning experiences will then be more meaningful, and students will become more interested in "what" they are learning. ◆◆◆

FEATURING: PRODUCTION SKILLS FOR NON-FARM AG. STUDENTS



Nelson I. Thorp

by
Nelson I. Thorp
Former Agriculture Teacher
Catlin, IL
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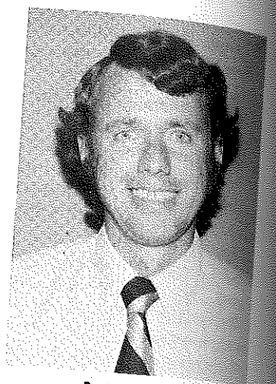


Burton E. Swanson

Agricultural Education has changed rapidly since the Vocational Education Act of 1963, both in terms of the instructional program offered and type of student served. In many parts of the United States the majority of agriculture students do not live on farms. In response to these changes, agricultural educators have developed new curricula to prepare students for off-farm agricultural occupations. Experience programs for these related agricultural occupations have been organized through cooperative education programs.

One school that serves a high proportion of non-farm students, but has not shifted its emphasis to off-farm occupations, is the Catlin High School in East Central Illinois.

Last year only three out of 75 students in the agriculture program lived on farms; however, the school maintains an active production agriculture program that is well received by students, the community and employers. The success of this program stems from the fact that both classroom instruction and the experience programs of students revolve around an active school farm program.

Furthermore, this program is not atypical in Illinois. Because this approach suggests an alternative in providing agricultural experience for non-farm students, and since it is a model that appears to be increasing in importance in this state, we believe it merits closer examination by other agricultural educators.

SMALL BEGINNINGS

School farm programs in Illinois frequently start with a small parcel of school owned land (generally 5 acres or less) that the FFA Chapter farms as a money making project. After the FFA chapter and the teacher demonstrate to the school administration and the community that they can properly handle a school farm, the chapter and teacher may decide to expand onto additional land in the community. As this transition occurs, the purpose of the school farm should change from largely money making to educational objectives. Such is the case with the Catlin program.

EXPANSION

By renting small parcels of land in and around Catlin that are too small for the large farm implements being used by most farmers (i.e., less than 10 acres), the agriculture department was able to expand from 1 acre in 1964 to 81 acres in 1977. Most plots are rented on a 50-50 basis, with the chapter sending each landlord (including the school) an itemized statement at the end of the year showing all expenses and receipts.

MACHINERY

Last year the chapter had a gross income of over $15,000 with a net profit of $3,700. Each year most of the profit is reinvested in used machinery, so that in 1977 the chapter owned more than $15,000 worth of farm equipment, including two tractors, two sets of farm implements—comprised of planters, cultivators, plows, field cultivators, wagons, in addition to a sprayer and a self-propelled combine.

CLASSES

Much of the instructional program revolves around the school farm. The Basic Agriculture class studies tractor safety and each student learns to drive the smaller tractor. Students take a written and practical driving test to become certified tractor drivers.

The Advanced Agriculture class studies crops and soils. Corn and soybeans are emphasized. Soil testing, developing fertilizer recommendations and the proper use of agricultural chemicals are studied, along with conservation tillage. These practices are then applied on the various pieces of land making up the school farm. The Advanced Agriculture class also begins learning about farm machinery operation, with an emphasis on safety.

FINANCES

The Agricultural Business Management class makes most of the financial decisions about the farm, including which crops will be grown on various parcels, final approval of fertilizer and pesticide recommendations and machinery purchases. Commodity markets are regularly studied and the class actually makes "hedges" and sells on contract. Crop insurance is studied and purchased. Loans are acquired from the local bank in the name of the FFA Chapter (approximately $6,000 in production loans are taken out each year). Finally, the class analyzes the records and determines how efficient it was in utilizing labor and capital at the end of the year.

MACHINERY MAINTENANCE

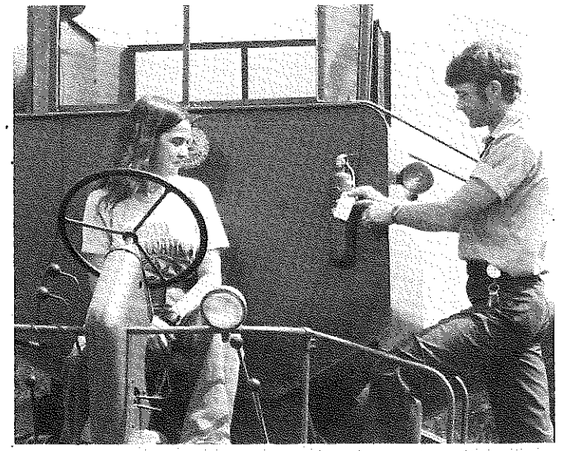
Each year used farm equipment is purchased rather cheaply from farm sales or local machinery dealers. The Agricultural Machinery class repairs, rebuilds, and paints new additions to the chapter's line of farm implements. In addition, machinery operation and adjustment are studied in class and students get direct "hands-on" experience working with the chapter's machinery. In addition to repairing the chapter's machinery, students also help set up new equipment for local dealers. The Welding class also has a hand in machinery repair and metal fabrication. The Multi-Cylinder Engines class does tune-up work, engine overhaul and trouble shooting on the chapter's equipment.

REAL LIFE PROBLEMS

Maintaining, repairing and overhauling farm equipment takes money. The profits from the farm makes it possible for the FFA chapter to pay all of these costs, without asking the school for any financial help. In short, the school farm provides real life problems (and situations) that students work to solve in the classroom and shop. The solutions they develop, whether it be a repaired combine or a fertilizer recommendation, are finally applied and tested on the school farm.

WHY?

In reflecting back on this approach an observer might ask, "But why spend all this time teaching production agriculture skills to students who will never farm? Couldn't this time and the other resources involved be better spent on non-farm agricultural skills?" Perhaps, but the agriculture students at Catlin High School are learning economics, business management, many different shop skills, along with machinery maintenance, repair and operation—basic knowledge and skills needed in both farm and many off-farm occupations. Probably more important, however, is the fact that the school farm is theirs; they learn to take the responsibility for seeing that tasks are properly carried out and they take pride in seeing a job well done. In the long run, these attitudes toward work and problem solving may be one of the most important things that the young people at Catlin High School can learn. ◆◆◆



Instruction in safe machinery operation is not limited to non-farm male students. Debbie Lomax, a junior at Catlin High School has learned the operation procedures of the chapter's self propelled combine. Here, Thorp explains the importance and use of a fire extinguisher. The combine was completely rebuilt, modified and painted by the agricultural machinery class.

Applying a pre-emergence herbicide. Here, Thorp works with Scott Smith and Randy Seaton to double check the sprayer before applying a pre-emergence herbicide to the corn test plots at Catlin High School. The sprayer was designed and built by the agricultural machinery and welding classes, with final spacing and pump pressure calibration being done by the agricultural business management class.

OCCUPATIONAL COMPETENCY— THE CONTEMPORARY BASIS

by
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What is the basis for effective teaching in vocational agriculture programs? Which came first, the chicken or the egg? Of these two questions, which would you feel more qualified to answer? In the case of the second question, there is at least an even chance that the other person would agree with you. On the first question, however, you might discuss or argue your idea versus his/hers for hours. The identification of the basis for effective teaching means different things to different people. In many instances now, as well as in the past, the most effective vo-ag teacher is that teacher: (a) whose FFA teams win the most contests, (b) who has the most State and American Farmers, and/or (c) whose students win the most Proficiency Awards. This connotation of "effective" teacher overlooks many struggling teachers of vocational agriculture who are doing an effective job of training students for occupational competency.

We are faced with evidence daily that our agriculture/agri-business industry has undergone many drastic changes since vocational agriculture emerged in the early part of this century. Vocational agriculture programs are continually attempting to adjust to the changes. In order to make such adjustments, the definition and basis for effective teaching of vo-ag must also change, or be adapted to everchanging industry needs.

The Educational Amendments of 1978 define a vocational education program in terms of preparing individuals for employment or providing additional preparation (upgrading and retraining) for a career requiring other than a baccalaureate or advanced degree.

The basis for effective teaching then becomes the degree to which the products of the program are prepared to successfully enter and advance in the occupations for which they are trained.

If we accept this basis for effective teaching, then we must restructure some components of our programs to achieve our mandated purpose.

CONCEPTS

Some important concepts for vocational-agriculture programs which are implied by the definition of vocational education include:

(1) Vocational education in agriculture is not for everybody. Certainly every student in a rural or suburban school setting can profit from vocational agriculture programs. The skills and knowledge being taught in our programs in areas such as horticulture, agricultural mechanics and leadership training are valuable to the future homeowner and community leader, but in many cases they will not contribute to that person's occupational competence. We are charged with limiting the enrollment in our programs to students who are planning to enter the agriculture/agri-business industry. Under the mandate of Congress, we cannot afford to run "rural industrial arts programs" which teach students how to landscape their homes, repair their cars, and fix leaky faucets. Despite the fact that these activities are a contribution to student and community life, accountability will cause our downfall if this is the result of our programs.

(2) Vocational education in agriculture must limit itself to the teaching of specialized skills and knowledge necessary to enter and advance in agricultural occupations. Over the past sixty years, more and more units of instruction have been added to the vo-ag curriculum. A mountain of information has been built to the point that we are trying to teach a little bit of everything and not very much of anything. To have an effective program, the occupations for which students are being trained must first be identified and then only curriculums providing those competencies necessary for employment in those identified occupations should be offered. It is time to decide to teach students to do a few things competently, rather than to do many things at a less than competent level of achievement.

(3) Vocational education in agriculture must continue to be adaptable in order to meet the needs of a changing agriculture/agri-business industry. According to the latest information, more students are now being trained for agri-business jobs than are being trained for production agriculture jobs. This is a positive example of adapting curriculum to the current demands of industry. The necessity for change and adaptation is a continuous fact. Local teachers should keep abreast of local agricultural community needs through advisory councils and visitation with agri-businesspersons and farmers. Programs must reflect these persons' needs for trained workers and must provide up-to-date training. Employers of today will not be satisfied with or supportive of programs providing yesterday's training.

Referring to the U.S. Office of Education's regulations for the Educational Amendments of 1976, we see that effective vocational instruction may be composed of five major components including: (1) classroom instruction; (2) shop, laboratory, and classroom related field work; (3) occupational work experience; (4) remedial programs, and (5) vocational student organization activities, which are an integral part of vocational instruction. With the possible exception of remedial work, these components of a vocational instructional program have been in the past and still are the mainstays of our vocational agriculture programs. Each of these components must be considered, however, in terms of the basis for effective teaching, the preparation of students for successful employment. How well do these components of present vo-ag programs meet the criterion?

CLASSROOM INSTRUCTION

Classroom instruction will always be a major component of any vocational agriculture program. This component must be linked to occupational preparation, however. For example, do you teach topics such as "How does corn grow?" or "How do you grow corn?" Undoubtely it *would be good* for the student to understand the biological principles by which a plant grows, but to be a successful corn farmer, that student *must know* the practical methods of growing corn on a commercial basis. Here again, our classroom instruction must be specialized and priority placed on developing occupational competencies. Obviously, a knowledge of osmosis, mitosis, and photosynthesis may not be necessary for growing corn. If it were, the Indians would have died of starvation long before the European colonists arrived.

SHOP AND LABORATORY WORK

Shop and laboratory work must be used to apply the facts learned in the classroom in a practical manner. We do this very well in the agricultural mechanics area of instruction, why can't we improve our laboratory work in the other areas of instruction? Laboratory experiences which closely simulate on-the-job practices should be linked to every area of instruction. The FFA motto, "Learning by Doing," applies just as well to agricultural supplies, pesticide application, and timberstand improvement as it does to welding, tractor maintenance or electrical wiring.

SUPERVISED EXPERIENCE PROGRAM

Supervised occupational experience programs began as home projects designed to provide students with knowledge and skills which could not be learned at the school. Such programs are still vitally important to all vocational agriculture students today. Here again, however, the supervised experience program must be linked to developing occupational competence. While feeding and showing a steer can provide every student with many enriching activities, does it really help the student who wants to be a forestor's aide or a greenhouse worker to develop occupational competence? Every student enrolled in vocational agriculture should plan and implement a supervised experience program which is aimed at developing those competencies essential to entry level employment. Admittedly, the resources the student has available may limit the scope and size of his/her program, but the program, nevertheless, must be related to a chosen occupational goal.

REMEDIAL PROGRAMS

Remedial programs must be integrated into vocational agriculture programs in order to develop an effective teaching program. This concept becomes even more important with the continued emphasis on "mainstreaming" disadvantaged students into regular programs. Here the vo-ag teacher may have to depend upon help from outside sources, including remedial specialists. Even if specialists are used, however, the emphasis of the teaching must remain vocational. Remedial teaching must still center on developing competencies which are necessary for the student to enter and advance in an agricultural occupation. If no remedial specialists are available, the vo-ag teacher should make use of individualized study materials to assist disadvantaged students to overcome their limitations.

STUDENT ORGANIZATION

The fifth component of vocational instruction is vocational student organization activities. In this area we can take pride in the fact that our student organization, Future Farmers of America, is the oldest, largest, and, in our unbiased opinion, the best student organization. We must realize, however, that FFA activities must still be an integral part of our teaching program and must, therefore, teach occupational competence. Does FFA do this? In many cases, yes. The Farm Management Contest is one example of an FFA activity which develops specialized occupational skills. The Poultry Judging Contest, on the other hand, perpetuates skills which are no longer used in modern poultry operations. All contests and programs should be revised periodically to stay in tune with what is happening in the field.

In conclusion, we must face the fact that the intent of Congress is to fund programs of vocational education in agriculture which are designed to provide skills and knowledge necessary for employment in agricultural occupations. Those occupations which our students plan to enter must be identified and curriculums prioritized to include the "must know" skills and knowledge. Our classroom instruction, laboratory activities, supervised occupational experience programs, and FFA activities must then reflect these skills and knowledge. To have a truly effective teaching program, as defined by the contemporary basis—occupational competency, we must provide students with a quality of training which will satisfy their future employers. ◆◆◆

PRINCIPLES OF SEED SCIENCE AND TECHNOLOGY, by L. O. Copeland. Minneapolis, Minnesota: Burgess Publishing Company, 1976, 362 pages, $14.95.

Principles of Seed Science and Technology is a comprehensive text about seed production. The book contains fifteen chapters and a glossary; and may be divided into three recognizable and fundamental components. These components may be described as: (1) the scientific bases of seed production, (2) the technical aspects of producing seed, and (3) the practical aspects of commercial seed production.

The first component, which dealt with the biological and chemical bases of seed production, is contained in the first three chapters of the book. These chapters addressed the topics of (1) reproductive processes in plants, (2) seed formation and development and (3) the chemistry of seeds. These chapters dealt with the theoretical scientific viewpoint of seeds.

The second component covered five chapters, and dealt with the technical aspects of securing and maintaining quality seed. These chapters dealt with seed germination, seed viability, seed dormancy, seed and seedling vigor, and seed longevity and deterioration.

The third component of the book dealt with the practical considerations of the commercial seed business. Seven chapters were devoted to this section of the book. Topics covered were seed production, seed processing and handling, seed drying, seet testing, seed certification, seed marketing, and seed legislation and law enforcement.

The book has made excellent use of drawings, photographs, charts, and tables. It is well written, and expertly authenticated with scientific data. Each chapter contained a list of questions which were quite important as a study guide for the chapter. A very comprehensive glossary of terms followed the chapters in the book.

The book is strongly recommended as a text for the post secondary and college study of seed production. It is not recommended for secondary students or for the general study of crop production. For vocational classes studying the needs of the agricultural seed industry, this book is an excellent and invaluable reference.

Keith E. Fiscus
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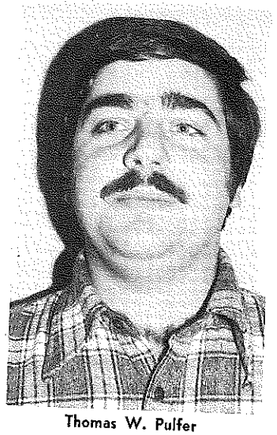
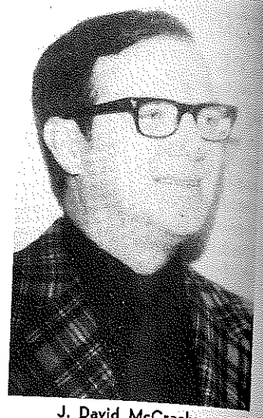
Effective Teaching with Livestock Cooperatives



Thomas W. Pulfer

By
Thomas W. Pulfer
Farm Management Instructor
Montgomery County Joint Vocational School
Clayton, OH
and
J. David McCracken
Teacher Educator
The Ohio State University
Columbus, OH



J. David McCracken

Wouldn't it be unique to have student interest so high that all members of a class would check the hog markets daily? What would be a better way to teach principles of cooperative organization than to farm and operate a cooperative? Wouldn't students enjoy instruction in swine management to a greater extent if they were directly involved in ownership of feeder pigs on the school farm? Why not learn about carcass value by following hogs marketed by the student cooperative through the processing plant?

A feeder pig cooperative has been in operation at the Montgomery County JVS near Clayton, Ohio, for three years. The primary purpose was initially to provide occupational experiences for students with limited opportunities for livestock production. Many additional educational values have been discovered by operating the cooperative.

PROCEDURES

This project started with four pigs in the first year and has expanded to 12 pigs presently with two separate feeding trials taking place. The first year began with 17 students and the instructor. All the students invested $10.00 to cover the cost of purchasing the feeder pigs. The project was started before the idea of a cooperative was formulated. Teaching materials about cooperatives were obtained through the Cooperative Extension Service. This unit was taught for a one week period with a Board of Directors being elected at the end of the lesson. The Board of Directors decided to meet every two weeks during the course of the cooperative venture. They had final say in all views expressed by the cooperative members. They then decided to hire a cooperative manager. The duties of the cooperative manager were to set up a work schedule, check to see that each member worked his shift and post the weights and rate-of-gain figures on the chart.

The manager developed a work schedule for the class members. Each member was required to care for the animals on the weekends on a rotating basis. During inclement weather, the instructors, who were also members of the cooperative, cared for the animals.

The feed used in the first year was purchased from a local elevator. All the costs incurred during the project were charged without interest. The elevator manager visited the school to inspect the feeder pigs and presented a program using the district salesman as a resource. The feed bills were paid after all the feeder pigs had been sold.

FACILITIES

Elaborate facilities were not required. The feeder pigs were housed in a barn on the school property. Pens were built and straw bales were placed around the pens for insulation. The concrete floors were cleaned approximately twice each week. A feeder and waterer were obtained for each of two pens.

RELATED TEACHING UNITS

Instruction has been much more relevant because of the swine cooperative. Records were kept by all members throughout the project. Members of the cooperative were forced to make purchasing and marketing decisions based upon available information. After the hogs were marketed, students visited the processor to examine the carcasses and obtain yield and grade data. Other areas of instruction having direct application were those on animal nutrition, animal health, and castration.

STUDENT REACTION

Observation of the situation at the Montgomery County Joint Vocational School would indicate that the members of the Farm Management Club are very enthused about the program. In the three years of the cooperative there has been only one missed feeding, no matter what the weather or time.

(Concluded on page 117)

Shown in the picture are three junior students at Montgomery County Joint Vocational School with the hogs being raised in a cooperative venture by the class.

★ ★ ★ THIS WORKED FOR ME! ★ ★ ★

Ag Mechanics "Dealership Simulation"

by
Bert Spaeth
Teacher of Agricultural Mechanization
Letchworth Central School
Gainesville, NY

All of us, as ag educators, share a common goal — that of preparing our students for their future careers. This goal is more involved than simply the fixing of tractors or teaching a specialty area. As ag educators we are aware of the important role F.F.A. plays in leadership and social development of our students. However, the area of attitude, responsibility, decision-making and management is often neglected or not emphasized. Farm equipment dealers have stressed the importance of these qualities, as I am sure most employers do.

These past three years I have restructured my approach with shop activities in an effort to see if attitude, responsibility, decision - making and management can be developed in secondary students.

THE ROLE-PLAYING APPROACH

At first the students participated in an activity called role-playing. Each student was given a job title such as service manager, parts man, sales manager, mechanic and dealer. The student was expected to perform duties associated with his role. For example, the parts man would be in charge of ordering all parts for the other students, maintaining an inventory and making sure supplies are sufficient.

This system gave the students a taste of what the various jobs entailed. Its major drawback was that students who did not enjoy their role could slow down the shop process, and the students did not have enough time to develop their competencies for their chosen job title.

DEALERSHIP SIMULATION

The role-playing evolved into a "Dealership Simulation". The purpose was to create the most realistic atmosphere for students, of the everyday work-world, while still being in a school setting.

In setting up a simulation for a dealership, the instructor is required to select dealership personnel. The students should be familiar with all the positions found in a dealership and the duties associated with each position. In selecting the dealer, the student's qualifications should include: a senior in his second year of agriculture mechanics, leadership abilities such as F.F.A. officer, be able to keep records and most important have a career goal of being a dealer.

Once the selection of the dealer is made everything begins to fall into place. The newly selected dealers must be given instructions in interviewing techniques by either yourself, or placement personnel. While the dealers review interviewing techniques, the remainder of the class should fill out job applications, indicating the position they want. The dealers review the job applications and reject all applications not properly completed. The first individuals hired are the service managers. Salaries are negotiated and duties and responsibilities defined. The dealers and service managers interview the remaining students to fill positions of sales managers, parts managers and mechanics.

COMPETITION INVOLVED

Two dealerships are established so that there is competition and so that employee numbers are somewhat realistic. Once the dealers have hired their personnel, the Agriculture Mechanics shop is divided into two areas so that each dealer will have an equal amount of floor space. Each dealer is given a fictitious checking account and given a balance of $20,000-.00. They are charged rent for the shop, fully equipped with trucking for $1,000 per month. The local Manufacturers and Trader's Trust Company Bank provided payroll checks and checks with the "dealership's" name printed on them. The dealers write letters to all tractor manufacturers requesting literature, service manuals and company uniforms and hats. Both International Harvester and Ford Tractor provide manuals, promotional literature and order blanks so that students could order hats and uniforms at regular dealer cost. All business forms used in this simulation can be purchased from the National Farm and Power Equipment Dealers Association.

The service manager and dealer work together to make sure there is enough work in the shop to keep all employees busy. They do this by contacting customers and setting up a trucking schedule.

The parts men are kept busy making sure all parts are ordered, checked in upon arrival, and all necessary supply inventories are maintained. The sales manager is expected to maintain promotional literature racks and keep bulletin boards seasonal in the shop. He should also work with a local dealer in designing an ad for local papers and if possible help in display work at a dealership. The mechanics are expected to repair equipment, attend daily "service schools" put on by the instructor and keep accurate records of hours worked on various projects.

SUMMARY

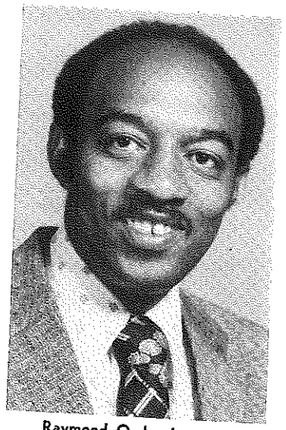
It has been interesting watching students cope with everyday business problems, such as customer complaints, parts orders not complete, employer-employee relations. The area dealers that hire the students exposed to this program are pleased. They feel that the students are more time-conscious, are more careful about their paperwork and make all around better employees.

As an instructor, I enjoy the simulation approach. The students are motivated by the sense of competing with one another, the learning experience more closely resembles the real world, the students are involved in decision making responsibilities, and develop leadership traits. Many valuable lessons can be taught through the simulation approach. For example, a messy, cluttered shop is unsafe and costly. We all know that but how do we as educators drive the lesson home. Again using the simulation, I had a fellow instructor play the role of an O.S.H.A. inspector. After the "dealers" received fines amounting to several thousand dollars, my point was made.

Using a simulated business in a shop situation works. How well it works is up to the creativity of the students and the flexibility and vision you have as an educator. ◆◆◆

Toward More Effective Teaching

by
Raymond Q. Lawing, Jr.
Teacher of Agriculture
Buckingham Junior High School
Dillwyn, VA



Raymond Q. Lawing

Every professional man and woman must possess certain basic information, techniques and skills necessary to the practice of his profession. In addition, most professions require special physical, emotional, social and intellectual traits. The primary aim of teaching is to bring about growth in the learners, to increase knowledge, to develop skills, and to stimulate growth in character and personality. The teacher should be anxious to see the desired changes and growth take place in the human material with which he works. Effective teaching is a process by which the teacher guides the learner in obtaining the desired growth. In presenting a lesson, it becomes necessary for the teacher to examine self. The question arises, how can one examine self? I am of the opinion that if the following questions are answered, the examination has been administered:

1. What have I taught?
2. Why did I teach it?
3. How did I teach it?
4. When did I teach it?
5. Did it make a difference?
6. Who determined the difference?
7. Suppose I had not taught it?

WHAT TO TEACH?

In vocational agriculture the teaching should be directed towards growth in vocational efficiency; hence, it is necessary to determine what to teach. In order to determine what to teach, be aware of the following:

1. Know whom you are teaching.
2. Identify the training objectives.
3. Be knowledgeable of the states guide for instruction.
4. Evaluate the student's previous experience.

TEACHING PLANS

I know of no better way of answering the above, or becoming aware of them, than by the preparation of teaching plans, which is an essential step to effective teaching. Most superior teachers use carefully prepared teaching plans regularly, and any teacher can do better work if he has a definite plan of action to follow. Following are some major concerns for preparing teaching plans:

1. Definite objectives can be adopted.
2. Local situations can be determined.
3. Teacher's knowledge of the subject matter is increased.
4. Material is presented in a logical sequence.
5. Time is saved in the classroom.
6. Better student interest is promoted.
7. Reference materials, visual aids, etc. can be ready when the period begins.
8. All important phases of the job can be covered.

PREPARATION

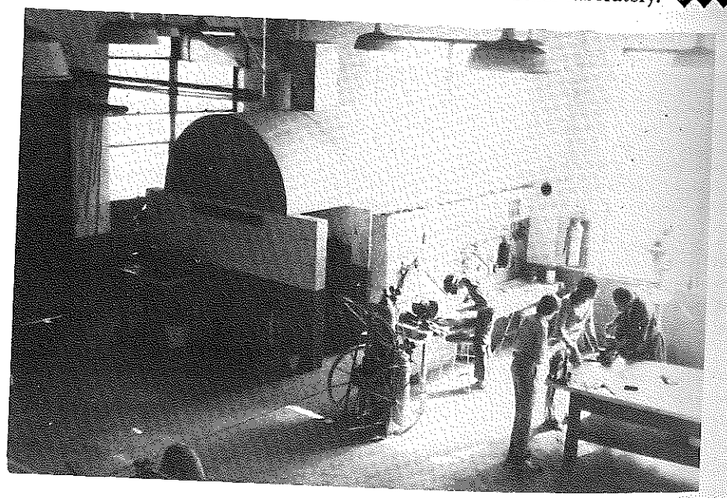
On the other hand, the preparation of teaching plans requires that the teacher review important technical information associated with the lesson or job. This requires a check of books, bulletins and magazines; hence, (he or she) can determine if (his or her) reference library is up-to-date, comprehensive, and applicable.

PRESENTATION

Finally, I believe it is necessary to apply certain techniques in presenting a lesson if our teaching is to be more effective.

1. Have students compile notebooks.
2. Encourage students to exchange experiences.
3. Help students formulate questions.
4. Provide for individual differences.
5. Guide students in writing articles.
6. Form groups or committees of students.
7. Utilize visual aids available.
8. Take students on educational tours.
9. Direct searches for materials related to the lesson.
10. Display exhibits.

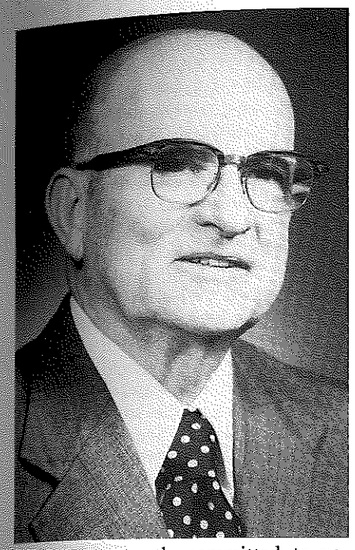
In the photo the student is receiving individualized instructions, a necessity for more effective teaching, in the agricultural mechanics laboratory. ◆◆◆



Leader in Agricultural Education:

Carl M. Humphrey

by
*Robert L. Hayward**



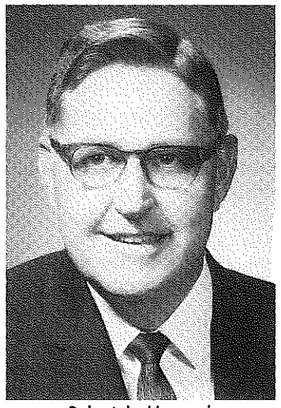
The man greatly committed to vocational agriculture, the man with a memory, the man with 44 years of experience in the field, the man dedicated to people of all ages who are willing to learn, the man who got into the action of all tasks and responsibilities in his program and did not stand on the outside looking in, and the man who has a story or experience on about any subject and can tell it in a way to captivate his listener—that man is Carl M. Humphrey from Missouri.

Maybe this is why hundreds of past state officers from all over the United States came to honor him at Missouri's 50th Anniversary FFA Convention this spring. Officers all the way back to 1928 came to honor Carl upon his retirement June 30, 1978. Mr. Humphrey has been active in vocational agriculture for 44 years and State Director of Vocational Agriculture in Missouri for 30 years. His rapport with young people and his interest in their development were truly proven because Carl remembered nearly every one of them by name and location, especially those who had held state office since he became state FFA advisor in 1948. He has the uncanny ability to recognize and name a former state officer or one of the many teachers in Missouri when one just happens to walk into his office. The past officers, former and present associates, and others established an agricultural scholarship program in his name.

Mr. Humphrey was a student of vocational agriculture at his home town of Maysville, Missouri, in 1928. He attended the very first National FFA Convention and became a charter member as a result of attending that first convention in Kansas City, Missouri. He taught vocational agriculture for 13 years and became a respected leader among his fellow teachers of vocational agriculture.

His interest and influence among FFA members and teachers has gone beyond the borders of Missouri. He has been superintendent of the FFA Department of the American Royal since 1948. Here he served FFA members and advisors from many states—from weighing in the steers in a cold November rain, to being master of ceremonies at the American Royal session for FFA members. Carl is on the Kansas City Committee for the National FFA Convention.

Mr. Humphrey saw the NVATA originate. He has attended and had an active part in every AVA Convention, except one, since 1946. His name could be found on the program of about any national or regional conference on agricultural education.



Robert L. Hayward

*Robert L. Hayward is Assistant Director, Agricultural Education Section, State Department of Education, Jefferson City, Missouri.

Agricultural education has experienced much growth and many changes during Mr. Humphrey's 30 years at the helm of Missouri's Agricultural Education Section. Enrollment in secondary vocational agriculture classes has grown from around 10,000 to 16,500 members. The Missouri Young Farmer and Farm Wives Associations started chartering local associations in 1969. These organizations, in only nine years, have memberships of 2,400 Young Farmers and 740 Young Farm Wives. Over 40 schools have either full- or half-time adult/young farmer instructors and approximately 100 schools are affiliated with the Missouri Young Farmer Association. Post secondary programs of vocational agriculture have been established in 10 junior and community colleges and one area vocational technical school under Humphrey's direction. Humphrey had a hand in the expansion of multi-teacher departments of vocational agriculture to the point where single teacher departments are becoming the exception in Missouri.

Humphrey credits part of Missouri's success in agricultural education with the fact that a six member state staff completely devoted to agricultural education has been maintained. He says the full-time, five-member teacher training staff in agricultural education at the University of Missouri has made a valuable contribution.

Always active in educational organizations, Mr. Humphrey served the American Vocational Association as vice-president representing agriculture, 1958-1961. In addition, he has served on the membership committee, resolutions committee, chairman of the constitutional committee, program chairman for the agricultural education division of AVA, and chairman of the adult department of AVA. He has been president of the Missouri Vocational Association, vice-president of the Mis-

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TIPS ON STUDENT DISCIPLINE

by
*William G. Camp**
Teacher Education
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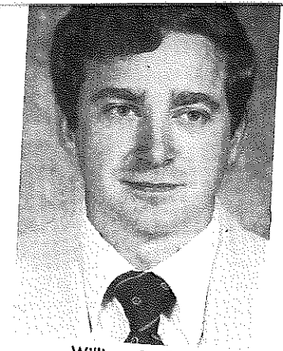

William G. Camp

In spite of your most conscientious efforts in lesson preparation, getting the classroom or shop in order, starting class promptly, and all the other "do's" of good teaching, you will face student discipline problems from time to time. The purpose of this paper is to present a few "how to's" for vocational agriculture teachers on handling those day-to-day, student-discipline problems as they inevitably occur.

IS THERE A PROBLEM?

First, be sure there is a problem worthy of correcting. Frequently, a student's legitimate actions may be incorrectly perceived as a discipline problem (7) by a teacher whose attention has been focused elsewhere. For instance, a student who breaks the point on his pencil and quietly borrows another from his neighbor should not be treated as a discipline problem, nor should the entire class be interrupted by the teacher demanding an explanation from the student (7). By the same token, a student who stops welding, moves to another booth, and says something to the student there may be borrowing a welding rod. Simply observing the student for a moment before correcting him may save the teacher wasted effort and unnecessary resentment on the part of an innocent student (2). In addition, certain minor deviations from the expected class norm may not require correction at all and may simply be ignored (4), or laughed off (1). Consider whether correction of such a minor infraction might not create a greater disturbance in the group than did the infraction itself. A teacher with adequate classroom control may get better results in terms of total student learning than a teacher who strives for absolute, total control of his class (7).

*Formerly assistant principal with responsibility for discipline, South Cobb Comprehensive High School, Austell, Georgia.

SIMPLE CONTROL

Once having determined that corrective action is required, initially try to use one or more of the simple control measures (1). In the classroom, often a simple glance, nod of the head, or some other type of body language (5) at the trouble maker will suffice to get him back on the right track. If this doesn't work, try directing a question to the offender. The question should represent a chance for the student to get back into the mainstream of the class, and not an attempt on the part of the teacher to prove that the student has not been paying attention. An alternative might be to circulate about the classroom or shop, being sure to pause beside or near the problem student. A powerful technique here is to place a hand on the student's shoulder, not in a threatening or coersive way, but in a very off-hand manner, as though the student were a piece of furniture or as if you were his big brother. These techniques do not normally include verbally correcting the student. Certainly, such simple control techniques may not be appropriate in all cases, but where they are appropriate, they will help regain control without the necessity for a disruption of the entire class. The student may even respond with gratitude that you didn't embarrass him in front of his peers by directly correcting him.

DIRECT CORRECTION

If the student is actually creating a situation which cannot be ignored and won't respond to simple control techniques, then a direct correction usually works. At this point, it is important to consider that your corrective action should be no more substantial nor severe than is necessary to restore the situation. Try simply telling the student to stop whatever he is doing—direct him, don't ask him, then continue with whatever you were doing before, without giving the student a chance to reply (3). If this fails to get results then you might direct the student to stop the undesirable behavior again, this time waiting for compliance but not allowing verbal response. Use of a word such as "now" may help. Moreover, if the student is given a chance to reply, he may feel compelled to escalate the situation because his status among his classmates is under attack. The direct correction must be a completely neutral approach; it should not include a raised voice or threat and should be carried out in a businesslike, calm manner. If the teacher displays irritation or anger, at the best he will further disrupt the classroom environment and at the worst he will encourage the student to respond in a similar manner. It may help you to remain calm at times like this if you do not consider discipline problems to be personal insults directed against you as an individual (4), (6).

MORE EXTREME MEASURES

If the direct correction fails to bring compliance from the student, then you must tread carefully to avoid creating a still more undesirable situation. You may want to stop class long enough to take the student outside to discuss the situation. If this fails to get results the student might be placed for the rest of the period in the care of a nearby teacher with a planning period or in an office under the supervision of a counselor, administrator, or other school official. Never simply throw the student out of class. Place him under the supervision of some responsible person. The key here is to avoid backing the student against a wall or trying to intimidate him with a direct threat, particularly in front of his peers. Avoid any threat that you do not fully intend or are not empowered to carry out. You may be able to prevent a student from enrolling in subsequent vo-ag classes but your principal may reserve that authority for himself. If you tell a student that he is out of your class for good, and he is back the next day, you have lost face with your students.

On the other hand, if the student does respond to correction, you may still want to have a private conference with him regarding his behavior. This may be either an informal or a formal teacher-student conference. The informal conference can consist of a few

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words after class or elsewhere in the school at some chance meeting. If the informal conference will suffice to correct the problem it is probably preferable to the formal type. A formal teacher-student conference should be scheduled with a time and meeting place clearly understood. Either type of conference may be followed-up by a telephone call to the student's parents. Be sure the student knows in advance that you are planning to call his parents. Any punishments you plan to administer should be given at this conference rather than in front of the class. If the disruptive behavior continues after all this, an in-school conference with the parents should be requested. Few parents will refuse to attend such a conference but you may have to be flexible about meeting on your own time. If you don't feel confident about handling parents, request that a school administrator and, perhaps a counselor, also attend. In any case, the student should be present unless the parent insists otherwise. The in-school conference has one advantage over a home visit in that it causes the parent an inconvenience which may result in a more powerful effect on the student. On the other hand, a home visit by the teacher may be even better, since it allows the discussion to be on a more friendly basis and demonstrates to the student a genuine concern on the part of his teacher. In fact, one reason most vo-ag teachers appear to have fewer discipline problems than other teachers is the tradition of home or farm visits conducted as a part of the student's supervised occupational experience programs.

TWO CARDINAL RULES

One important concern before making discipline referrals to the principal or assistant principal is that classroom discipline is a fundamental teacher responsibility. The teacher who is consistently unable to control his class has either the wrong class or the wrong profession. In other words, *handle your own discipline problems* (5). At the same time, recognize that occasional problems will arise which you will not be able to solve in any reasonable manner. When this happens, you should feel justified in referring the problem student to your school administrator in charge of student discipline (4). Hold in mind, that when you ask for help of this type, you may be admitting that the problem is beyond your ability to handle it. Obviously, this concern does not apply to the situation where a student becomes completely uncontrollable, i.e. refuses to comply with any teacher directive (note that directive is used here, *not* request.) Or, if the student appears to pose an immediate physical danger to either the teacher or another student. In such a case help must be summoned immediately. This is not the normal situation, however, and is not the subject of this paper.

Regardless of the severity of the situation, if a discipline problem requires any action on your part more extreme than a minor direct correction, *document it*. A brief note including the name of the student involved, date, time, nature of the offense, and action taken should be made every time a student requires disciplinary action (8). This documentation can be most helpful later in teacher-parent conferences. In addition, if it becomes necessary to refer the student to an appropriate school administrator, a series of specific anecdotal records will be beneficial from two standpoints. First, it tells your administrator that you have done your homework—that you have actually attempted to solve the discipline problem. Second, it gives the administrator a more detailed description of the student's continuing behavior problem.

BRIEFLY:

1. Be sure the situation you have is actually a discipline problem worthy of correction.
2. Try to use a simple control technique, if possible.
3. If necessary to directly correct the student, do so in a calm business-like manner. Avoid shouting, sarcasm and head-on confrontation.
4. If a student refuses to respond to directions, remove him temporarily from the class, keeping him under appropriate supervision until he can be dealt with.
5. Try either an informal or formal teacher-pupil conference.
6. If these techniques don't get results, request an in-school parent-teacher conference or schedule a home visit where the discipline problem can be discussed.
7. Document every discipline problem that requires action on your part. Include the student's name, date, time, offense, and action taken.
8. If all else fails, refer the student to the appropriate school administrator. Include as a part of the referral a detailed, written anecdotal record of your attempts to work with the student. ◆◆◆

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CONTINUED *EFFECTIVE TEACHING WITH LIVESTOCK COOPERATIVES*

There has also been constant conversation concerning the weight and health of the hogs. At least 10 members have volunteered to help with each weighing. Many questions asked by students or parents on home visits in the summer concerned whether the cooperative would be in operation the next year or not. Teaching vocational agriculture is more effective and easier with a livestock cooperative.

OTHER POSSIBILITIES

To provide an experience in a livestock cooperative doesn't necessarily mean a feeder pig project. The class also experienced a broiler project. The entire cost was $2.00 per student and the amount of space needed was 8′ x 6′ x 4′. As you can see, this project was economically feasible and required little space. This project was housed in the farm mechanics laboratory in the spring of the year.

SUMMARY

A small investment for each member of the cooperative is required, yet the educational value is the same as for a large investment. The cooperative allows instructors the opportunity to work with livestock and requires that they keep up-to-date. In summary, the cooperative has provided the teachers at Montgomery County JVS the advantages and rewards of working with a hands-on experience and has resulted in renewed interest in the teaching profession. ◆◆

Relevant Ag. Education— A Goal of Competency Based Education

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Teachers of agricultural education have always been sensitive to the importance of providing educational experiences that are oriented to the needs of American agriculture. Spiraling inflation and the demand for more effective use of tax dollars have further increased the importance of making the learning process more realistic and relevant. General community surveys and informal follow-up studies have traditionally been used as bases for the development and revision of local programs of agricultural education. The conduct of such surveys and follow-up studies has reflected the positive attitudes of teachers at local levels in striving to meet the needs of their communities.

With the increased emphasis on providing more effective programs, teachers need to carefully examine new approaches in the delivery of career-relevant instruction. While community surveys and follow-up studies are useful, teachers also need to be certain that educational experiences are developing the competencies needed for occupational entry and advancement. It is also important for students to have the self-confidence that comes with knowing that the skills and knowledge which they are developing will result in successful entry and advancement in employment. Employers all too often feel that beginning workers emerge from training programs unable to competently perform the tasks which must be accomplished.

Overcoming this problem is a basic goal of competency-based vocational education which is designed to provide students with the skills and knowledge required for employment. Competency-based vocational education is a systematic approach to education in which student progress is measured in terms of job-required performance standards, not norm-referenced standards comparing students with each other.

TASK ANALYSIS SURVEYS

How can teachers effectively base curricula upon job-required standards? Facing this problem squarely is essential if the problem of accountability is to be overcome. Periodic community surveys should continue to be an integral part of program planning in order for teachers to determine general community needs, and follow-up studies should be used to ensure continued program relevance. At the same time, however, teachers need to determine the skills and knowledge required for employment in the specific occupational areas within their programs. Surveys can be conducted by teachers to obtain this information, but most school systems do not have the availabile resources in either money or time to use this approach. A more feasible approach is to examine all available research to determine whether task analysis surveys have recently been conducted for the occupational areas in which training is being provided.

PERFORMANCE OBJECTIVES

A close look at available research reports and summaries will reveal that a number of task lists are currently available. A thorough review of these reports will also reveal that performance objectives, based on the surveys, have been developed as a result of some of the surveys (performance objectives are statements in precise, measurable terms of particular behaviors that learners are expected to exhibit under specified conditions). Objectives which have been developed can be studied, refined, and adapted to the local school-community situation. If only task lists are available, it is necessary for individual teachers to develop objectives to correlate with the tasks. This should be accomplished in consultation with both individuals who have technical expertise in the occupational area, as well as with those who have expertise in specifying objectives. The following elements should be a part of each performance-based objective:

1. Condition(s) — the situation confronting the learner.
2. Performance — the exact behavior expected of the learner.
3. Standard — the level of proficiency required of the learner for acceptable performance.

Objectives which are developed to conform to this approach can realistically be used as a foundation for planning career-relevant instruction.

V-TECS

One organization that is making significant progress toward implementing competency-based education is the Vocational-Technical Education Consortium of States (V-TECS). Systematic use of task analysis procedures is an important part of the V-TECS approach. Work has been completed for various job titles in the following occupational areas related to agriculture: cotton ginning, floriculture, gardening - groundskeeping, nurseryman, timber harvesting, tractor mechanic and turf management. Other areas in which work is underway include: agri-chemical, agricultural parts clerk, agricultural production, cattle rancher, farm equipment mechanic, farm equipment operator, farm management, meat cutter, and veterinary assistant. The outcome of this work is comprehensive catalogs of performance objectives and performance guides based upon the actual tasks performed by incumbent workers. Teachers of agricultural education can use these objectives and others which may be available to develop career-oriented programs which effectively measure the performance required for employment.

(Concluded on the next page)

The competency-based approach is not always easy to implement. Materials may not be available to devise such instruction. The affective domain is difficult to measure, yet very important. Using the competency-based approach may damage the self-concept of some teachers who may have difficulty accepting a less visible role in the classroom. More record keeping and management-type activities are required. Teachers must keep daily tabs on student progress in order to detect subtle learning problems.

ADVANTAGES

The advantages of competency-based education developed using the results of task analysis procedures outweigh the disadvantages in a number of ways, however. By using this approach in agricultural education, students will understand exactly what is expected of them, the conditions under which they must perform, and the standards used to measure their performance. They will know that completion of the required objectives will result in successful entry and advancement in employment.

In addition, individualized instruction is encouraged. Students can have the satisfaction of moving along at individual paces, and when additional time is needed for successful learning experiences, that time is available. With the increased emphasis on providing successful experiences for all students, the use of competency-based education will likely result in a lower dropout rate in programs of agricultural education. Students who do not measure up to the desired standards will simply continue to engage in the learning activities until the necesary level of performance is acquired.

An outcome of emphasizing successful learning experience should be more positive attitudes toward learning. This should result in highly motivated students who not only know where they are going and how they will get there, but who are also secure in the knowledge that they are learning what they need to know. Attitudes of self-management and discipline on the parts of students are encouraged.

Teachers and employers also benefit from a competency-based approach to instruction. Teachers can spend additional time concentrating on how to teach, confident that they are teaching the correct subject-matter content. They can increase their effectiveness as managers of the resources available to students, with more time available to individually guide students toward their learning objectives. Employers benefit by receiving workers who can perform at specified levels of proficiency, with these levels based on actual job requirements.

CAREER COMPETENT

In conclusion, the competency-based approach should achieve a basic goal of agricultural education; namely, to assist students in becoming competent in a career-relevant body of knowledge and applied skills. As with any new approach to program planning and curriculum development, it should be examined carefully to assess potential effectiveness. If implemented, a continual process of evaluation and refinement is essential in order to assure continued relevance. ◆◆◆

CONTINUED *LEADER . . .*

souri Vocational Agriculture Teachers Association, vice-president and president of the National Association of Supervisors of Agricultural Education.

Carl holds an honorary life membership in the National Vocational Agriculture Teachers Association. He has appeared on vocational agriculture conference programs in Indiana, Kansas, Minnesota, Ohio, and Florida; and state vocational meetings in Colorado, Louisiana, and Nebraska. He has served as guest instructor in vocational education at Colorado State University, Fort Collins. He served two years on the editorial committee for the teaching aids developed for vocational agriculture teachers by "Successful Farming." He was chairman of Missouri's Standards for Vocational Agriculture committee. He has served as superintendent of the FFA Department at the Missouri State Fair since 1948.

Interested in all phases of vocational education, he has served on many state and national committees in support of legislation for vocational education, and has participated in several national conferences related to education. He has served as a member of the National FFA Board of Directors, and in recognition of his leadership and service was awarded the Honorary American Farmer Degree. He received the V.I.P. award at the National FFA Convention in 1973.

Carl was presented a plaque in 1970 by the Missouri Electric Cooperatives in recognition for dedicated service in developing tomorrow's rural leaders through vocational agriculture and the Future Farmers of America.

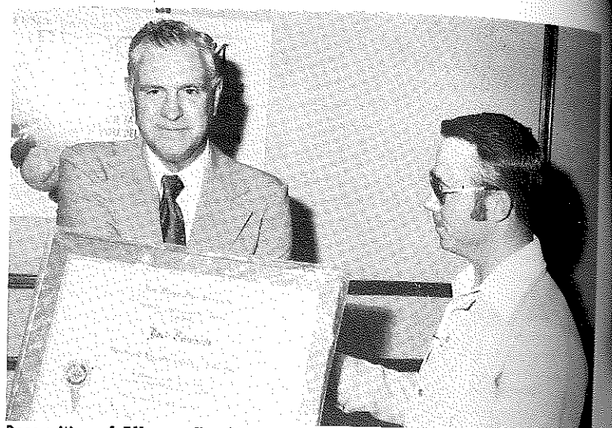
Reared on a northwest Missouri farm, Carl was a charter member and president of his FFA chapter. He earned his B.S. Degree in Agriculture and M.Ed. Degree at the University of Missouri where he was president of the Agricultural Education Club, Chancellor of Alpha Zeta, vice-president of his professional fraternity, and a member of the livestock judging team. The Faculty-Alumni Award for Distinguished Service was presented to Mr. Humphrey by representatives of the University of Missouri, Columbia. He also holds the Award of Merit from the College of Agriculture, University of Missouri.

The breadth of his interest and activities is further indicated by his leadership in Phi Delta Kappa, Gamma Sigma Delta, Kiwanis, PTA, and Boy Scout work. He is an elder in his church and served as chairman of the church board. Carl is married to the former Margaret Todd of Fayette. Mrs. Humphrey taught music and English in high school. They have two sons and one grandson.

Mr. and Mrs. Humphrey manage their 740 acre farm near Fayette. They raise and sell registered Shorthorn cattle. In addition to farming since his retirement on June 30, 1978, Carl serves on the State Young Farmer Executive Board for the 1978 National Young Farmer Educational Institute. ◆◆◆

STORIES IN PICTURES

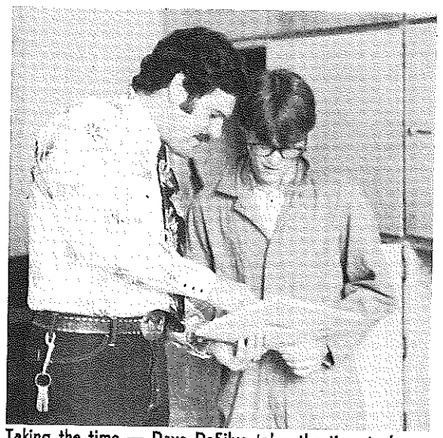
by
Joe
Sabol



Recognition of Effective Teaching — Joel Edwards (right) is shown being presented with the N. M. Vocational Agriculture Teacher of the Year Award by Dr. L. S. Pope, Dean of the College of Agriculture and Home Economics, New Mexico State University. (Photo courtesy Paul Vaughn, New Mexico State University)

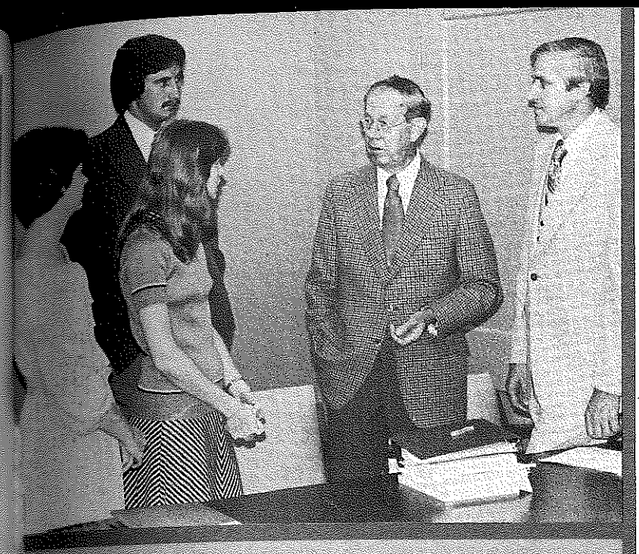
Problem Solving — An effective teaching method brings students and teachers close together in a real life setting. Ms Janess Eilers helps her three Exeter High School students to discover and solve insect problems in the greenhouse at Exeter, CA. (Photo courtesy of Joe Sabol, Cal Poly, San Luis Obispo)

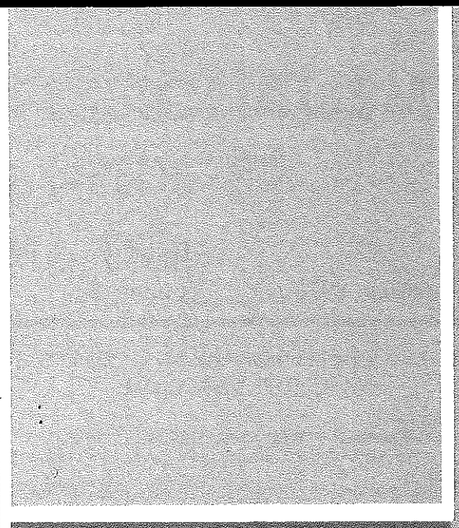
Outstanding Young Teachers — Carl Wheeler (left) and Jimmy Owens indicate their pleasure over being selected as Outstanding Young Teachers in New Mexico. The cash awards are presented by the New Mexico Farm Bureau. (Photo courtesy Paul Vaughn, New Mexico State University)



Taking the time — Dave DeSilva takes the time to be an effective teacher with one of his shop students at Riverdale Joint Union High School, Riverdale, CA. (Photo courtesy of Joe Sabol, Cal Poly, San Luis Obispo)

Effective teaching must include much practice time for the students. The Pennsylvania State FFA Judging Contest provides the practice and incentive for students studying Soils and Land Judging. Both sight and touch must be used to make decisions in land management. (Photo courtesy photography committee and James Mortenson, Penn. State)





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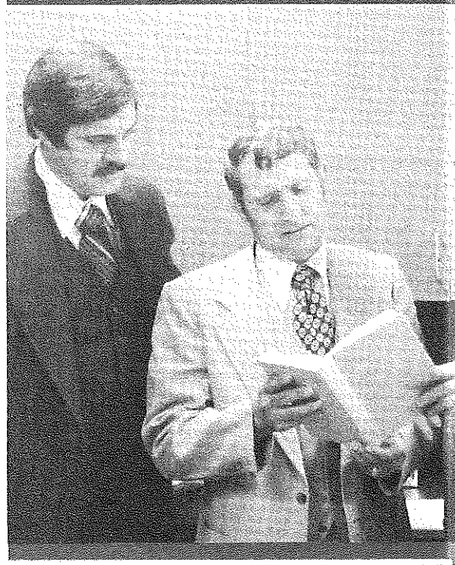

Theme— Professionalism— That's The Name of The Game