Stories in Pictures

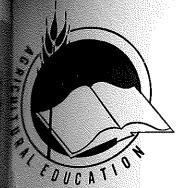
Robert W. Walker University of Illinois

PURPOSES OF PROJECT Increase supply of birds Develop interest in wildlife conservation Learn to raise and protect wildlife Work fagether today for greater natural resources tomorray A second data. A second data.

Conservation of renewable natural resources, game and wildlife are everybody's constituent of the Wadena, Minnesota FFA in cooperation with more than 140 conservation of fraternal, sportsmen, farm, agribusiness, and school groups participated in local programation objectives are to preserve and improve environment, increase wildlife numbers work together for improved natural resources in the future. (Photo furnished by W. Kortesmaki).



Charles Workman, right, a 1969 graduate of Greenbrier East High School, Lewisburg, West Virginia, shows his Vocational Agriculture instructs. Nelson Dailey, how to properly lubricate a farm machine. Charles completed four years of Vocational Agriculture and one year of Agriculture and Specialist.)



Agricultural Education

December, 1971

Number 6



Featuring: MULTIPLE TEACHER DEPARTMENTS

The

Agricultural Education

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EDPRESS

Vol. 44

Pioneers in Agricultural Education: Russell W. Cline

Process Model for Using Results of Competency Studies

Training Students for Unknown Working Conditions

Teaching in A Multiple Teacher Department

Second-class postage paid at Athens, Ohio.

relates to method of seed production.

Multiple Teacher Departments in Agribusiness

December, 1971

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THE AGRICULTURAL EDUCATION MAGAZINE is the monthly professional journal

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subscriptions designate new or renewal and address including zip code. Send all

subscriptions to Doyle Beyl, Business Manager, AGRICULTURAL EDUCATION MAGAZINE, Box 5115, Madison, Wisconsin 53705.

Kenneth Brashaber, left, is shown examining lesions of Southern Leaf Blight found

While multiple teacher departments point out the necessity of coordinating activities, it also provides a climate for better and more efficient use of those activities.

on one of the varieties in the department's corn plot while Gene Knoy, adult farm class member observes. Henry Ritter, right, is shown in this scene presenting to mem-

bers of his vocational agriculture class the problem of Southern Leaf Blight as it

At the Rushville school, each teacher shares the secondary level program but divide

the responsibility of adult and young farmer program. (Photo by Leslie Fenimore, Rushville, Ind. Submitted by Dewey Stewart, State Consultant)

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From the Editor's Desk

On Being An Editor

since the untimely death of Dr. Harry W. Kitts in June, 1971, we (Edgar Persons and Milo Peterson) have exed as editors of our professional journal. This has been sewarding, if somewhat demanding, experience espesince neither of us anticipated assuming this re-

We have learned a great deal from the articles subby our colleagues. It is unfortunate that we have at been able to publish all of the material that has been sont to us. All unpublished copy will be forwarded to the new editor, Dr. Roy Dillon. We thank the special editors for their efforts to provide us with high quality copy. Certainly we would be remiss if we failed to acknowledge also support and encouragement we have received from Lditing Managing Board.

Now a final word before we relinquish the editor's perogatives and responsibilities. In this issue the trend toward more multiple teacher departments is emphasized. We believe this to be as appropriate as it is inevitable. A complete and balanced program of vocational agriculture is beyond the capacity of one or two persons. This is certain to influence the pre-service as well as the in-service education of teachers. In this process it is important that we continue to share ideas and experiences.

We take this opportunity to wish the new editor the same professionally stimulating experiences that have been

A New Team



Dr. Roy D. Dillon, Professor of Agricultural Education at the University of Nebraska becomes Editor of The Agricultural Education Magazine with the January 1972 issue. He succeeds the late Harry Kitts. Since Dr. Kitts' death in June 1971, Dr. Milo Peterson and Dr. Edgar Persons of the University of Minnesota have served as Acting Editors.

Dr. Dillon received the Ed.D. from the University of Illinois in 1965. His experience includes eight years as a teacher of vocational agriculture and two and one-half years as Associate Professu and Chairman of the Agriculture Program at Morelead State University, Kentucky. He has been on the staff at the University of Nebraska for the past five years.

In 1968 Dr. Dillon directed a National Seminar for College Deans at the University of Nebraska which was designed to identify strategies for preparing professional personnel in vocational-technical education. He served as Co-Director of the Nebraska Occupational Needs Research Coordinating Unit for Vocational Education from 1967 1969. His present responsibilities include teaching and regarch in agricultural education. He is a member of the saif team involved in the "Programmed Individualized Instruction" in pre-service teacher education. His research ofests include identification of new clientele groups for resultural education and occupational guidance in agricultural occupations.



Dr. Harlan E. Ridenour, Director of the Agricultural Education Curriculum Materials Service, Ohio Department of Education, has been appointed Business Manager by the Editing-Managing Board of The Agricultural Education Magazine. Dr. Ridenour succeeds Doyle Beyl who is completing a three-year term this month.

Dr. Ridenour earned the B.S., M.S., and Ph.D. degrees from The Ohio State University. He taught vocational agriculture in Ohio for twenty years prior to his appointment as Director of the Curriculum Materials Service in 1962, Dr. Ridenour served in the U.S. Army from 1942 to 1945 and holds the rank of Major in the Army Reserve (Retired).

Dr. Ridenour is Chairman of the Curriculum Materials Committee of the Agricultural Education Division of AVA. In 1969 he became one of the charter members of the Vocational Instructional Materials Section of the New and Related Services Division of AVA. He is a member of the Board of Directors of the American Association of Vocational Instructional Materials, serving as Secretary of the Board since 1970. In May 1971, Dr. Ridenour presented a paper on "Setting Student Performance Standards for Program Evaluation" during the National Seminar on Agricultural Education in Transition.

WEER, 1971

COVER PHOTO

MULTIPLE TEACHER VOCATIONAL AGRICULTURE DEPARTMENTS

Donald E. Wilson, Chief Bureau of Agricultural Education Sacramento, Galifornia



In California the number of multiple teacher vocational agriculture departments continues to grow. Our vocational agriculture enrollment has increased from 14,000 to 32,000 in grades 9 through 12 in the last ten years. The number of multiple teacher departments has risen from 77 to 122 over that period of time. Well over half of our vocational agriculture students are enrolled in programs located in multi-teacher depart-

ments, and the majority of our vocational agriculture teachers are employed in multi-teacher departments. Not only has the number of multi-teacher departments increased, but the number of teachers in the multi-teacher departments has also expanded. Two-teacher departments have grown into three, and three and four-teacher departments now have four and five teachers. The following chart illustrates the trend in multi-teacher departments.

Size of Vo-Ag		
Department Staff	1961	1971
2 teachers	60	83
3 teachers	11	25
4 teachers	6	10
5 teachers	0	3
6 teachers	0	0
7 teachers	0	1

As the number of multiple teacher departments increased, so did the incidence of problems in administration of these departments. Bureau of Agricultural Education staff members worked with individual vocational agriculture departments as problems arose in an attempt to provide assistance. This was more of a procedure of "putting out fires," rather than one of an organized program of improving administration and providing assistance. At no point in our preservice or inservice teacher education programs did we devote specific attention to the effective administration of multi-man vocational agriculture departments. Many of these departments became multi-man departments in the last ten years or grew from two-man to four-man departments, etc. Teachers became department heads because of length of service or because they

were on hand when the department expanded. There a little thought given to the role and responsibility of a partment head as it varies from a single to a multiple m program. In many instances the department head role two-man departments is "unofficial" and casual in par As these two-man departments grew, real problems veloped because of no organized system of departs administration.

The Bureau of Agricultural Education decided 1970-71 to devote attention and effort to the improvement of administration in multi-man departments. A prop to provide inservice training in this area was solicited in the provision of the Education Professions Development Act, and California State Polytechnic College at San L Obispo responded.

The in-service training program consisted of the day workshops each involving 30 vocational agricult teachers who were heads of multiple man department These workshops were conducted in different areas the state over a four-months period. Provision was made reimbursement to the local school district for any substi teacher time required and for per diem and travel expen A total of 90 department heads were involved in the tr ing sessions, which included a one-day follow-up sessions four months after the initial three-day session. The gram involved pre- and post-evaluation. The workship addressed the following areas concerning department ministration:

> Day-to-day maintenance and operation Planning for growth and expansion Staff involvement in supervision and advisement of occupational experience

Effective summer programs Many different tasks, procedures, and items were sidered under these topical areas.

A handbook on administration of multiple man cational agriculture departments will be developed. intended that information developed and experience gas in these workshops will be utilized in our regular prein-service teacher education program so that this important area is not neglected in the future as it has in the past.

MULTIPLE TEACHER DEPARTMENTS IN AGRI-BUSINESS AND NATURAL RESOURCES

Victor Bekkum Instructor in Agriculture Barron High School Barron, Wisconsin



Marvin D. Thompson Department of Agricultural Education Wisconsin State University River Falls, Wisconsin



secondary school courses in Agri-Resources have is on of much importance in agriculsure These trends are reflected at both national and state levels. As an illustration, Wisconsin departments have 3 15.747 in 1960 to 18,804 in 1970. With these increases in enrollment has we been the development of multiple seather departments and these have From from 13 in 1967 to 23 in 1971. Smilar or greater growth has been esperienced in nearly every state. As a further indication of the agricultural business emphasis in the Wisconsin mornins, over 4,000 students are from a non-farm background and an incrasing number of girls are being

The problems involved in the de-sents are relatively new in most states. Comparisons of the findings of a Wisprovide a number of guidelines and stachers and administrators as they seach the need for a multiple teacher emphasis on agri-business or staff before new teachers are employed. walt programs.

When Does a Program Need Additional Teaching Staff?

The development of new emphases answering this question. Specialized programs require additional staffing more quickly than do general programs. At least in the early development of specialized programs, greater amounts of staff time are spent in individualized instruction and in the development of deach increases in pupil enrollments teaching facilities and equipment, The Wisconsin study showed that a second teacher was added when the enrollments reached 105 in general programs and 71 for specialized programs,

What are the Bases for **Teacher Selection?**

General programs with enlarged enrollments tend to rely upon beginning teachers for additional staffing. This may be a reflection that traditional teacher preparation programs are acceptable in meeting these needs. In most cases the administrator provides the initiative and responsibility in employing the additional staff member.

Specialized programs are more likely sonsin study with those of other states to look to other sources in meeting staff needs. Experienced teachers or desclusions which may be of use to agricultural specialists from other fields are often selected. Much emphasis is placed upon the special expertise of anization. In the summary follow- all teachers in the program and conreference is made to either "gen-siderable consultation takes place beor "specialized" programs as they tween the administrator and existing

How Are Programs Organized and **Teacher Responsibilities Assigned?**

Most multiple teacher departments The type of program developed have not relied upon a formal administrative of primary importance in istrative structure in their organiza-

tion. In the smaller multiple teacher department, the majority of decisions seem to be made by the school administrator on the basis of advice from the teachers involved. However, as departments increase their teaching capabilities with both regular and paraprofessional staff members, the need for definite administrative organization becomes evident.

With respect to specific responsibilities, teachers in general programs tend to share rather than divide responsibilities. An example of this division of duties would be that one teacher would supervise the school land laboratory, another teacher train certain judging teams and another teacher be in charge of the departmental greenhouse.

Organizational patterns for departments where specialized programs are provided are still in an experimental stage in most states. Teachers and administrators will need to depend upon local advisory councils, state department consultants and teacher educators as they develop programs of organization most suitable to their local community. Whatever the form of organization, agricultural departments will find it necessary to provide more staffing as they attempt to serve their additional publics and increased responsibilities.

WILL WE DEVELOP MORE

MULTIPLE TEACHER DEPARTMENTS

Al Hilbert Agribusiness Instructor Southern Door High School Brussels, Wisconsin

A VIEW FROM WITHIN



Fourteen years of work as an individual in a one man department of high school vocational agriculture and two years experience within a two teacher department have provided some insights and attitudes

which reflect this writer's personal choice.

Our local high school has had a two man department since the advent of a pilot program added in 1969. In Wisconsin most departments are of the one man type, some have two teachers and a few are staffed with three instructors of vocational agriculture.

Here at Brussels, the flexible modular system of scheduling, which may have an effect on the desirability of multiple teacher departments, is in use. Experience has revealed some very real challenges and frustrations when performing in a one man department.

Let me sight two examples that perhaps are not unique to our school system.

- 1. Where flexible modular scheduling is employed, the lone teacher may be taxed for every minute of his time, in classes and in the resource center, not leaving sufficient freedom to perform special activities required of an agribusiness instructor.
- 2. In most high schools the department facilities are oftentimes at the furthest end of the school plant and faculty communication is difficult.

Many more real factors can be identified that can affect the performance of agribusiness teachers in our schools.

This writer has identified the following seven major benefits of a multiple teacher department.

- 1. Cooperation with one another for achieving greater individual instructor flexibility.
 - With more than one instructor a greater degree of flexibility in daily activities can persist. It is generally a simple matter for the co-worker to "cover," in such emergencies as special parental conferences, out of building individual or small group instruction, and supervision of urgent departmental responsibilities. This type of activity can be reciprocal with other instructors in a cooperative manner within a department.
- 2. The advantage of greater creativity.
- The old adage that, "Two heads are better than one," can lead to more innovative techniques, providing that all instructors are aware of the challenges and problems of each other. It is the advantage of a pool of overall general knowledge and ideas.
- 3. Greater scope, depth and breadth of the total agribusiness program. Vocational agriculture has taken on an ever broadening curriculum. One man may find it difficult to master all the subject areas necessary to adequately provide a comprehensive program of agribusi-
- 4. Potential for team teaching prac-

It can permit the instructor with the greatest ability in a particular field to specialize and use those

talents in a given unit of instru tion. A greater variety of teach aids can usually be secured a shared within a department, tentimes school facilities are he geted more on numbers of teach ers than student numbers.

- 5. A sharing of trials, tribulates and successes,
- This may not appear to be in portant, but a "shoulder to a on," can be a very significaasset in carrying out profession responsibilities. Both receiving as giving counsel and advice. mands close understanding, a cern and feeling for all members of a multiple department in the cooperative efforts in the scho and community. In a positi sense, the mental health of teacher can be strengthened good conscientious co-workers.
- 6. The stimulating effect on perfect mance due to close observation of co-workers.
- The arousal of the sense of prein performance of an instruct when his actions are closely served. A second or third m can more fully appreciate t challenge of a task. "Gee, Georg I like the way you handled that Even teachers need reinforces
- 7. The evaluation of profession performance.

Multiple teacher departme have a built in and immed opportunity for strengthening rection of the efforts of each near ber of the department. Collean must be willing to accept a car cal analysis and be able to of it as well. Through commun tions in a department, our professional work can be improved.

As in any organization where people ork together there are some problems that exist in addition to a loss of some independence. Experience has uncovgod three basic areas.

- Extra effort is required for coordinating the mechanics of the departments.
- A definite area of responsibilities needs to be inaugurated for the total and effective performance of each of the members in a multiple department. It is essential to know what your colleague is doing in relation to your segment of the program of instruction.
- 2. Extra effort is needed in tolerating possible bad habits of a coworker.
- This is true especially when facilities are closely shared. Such minor annoyances as leaving materials and supplies out of place can be a real source of irritation.
- Adequate space and facilities for a multiple department must be iustified.
- As student enrollments grow, and instructional needs expand, it is unfortunate that facilities frequently do not enlarge proportionately. Adding an extra man where one man was before may not solve the problem of increased enrollment. The idea of sharing facilities is good, but space must be available for each instructor to operate.

This writer believes that student generally dictate the advent a multiple teacher department. It is that the broad field of agribusiness, the intensification of training for tomorrow's agriculturists, sould dictate a trend. Start thinking about a multiple teacher department in

THE FORGOTTEN RESOURCE

- for Training in Agriculture

Harold Binkley, Teacher Education, University of Kentucky



nities where vocational agriculture is taught there are many farms, both specialized and diversified, which could be, but are not used for training students in farming. These are

students taking vocational agriculture. And, if there are students from such farms, (which the fathers are not owners) many of them have a pig or a calf as a "get by" project.

We have forgotten or overlooked the resources of these commercial farms as training possibilities for students of vocational agriculture. We have been "near sighted" and have "thought small" where we should have been "far sighted" and "thought big." The operators of these farms have a need and our students have a need. These needs are compatible — the farmers need help in their farming operations and the students need training situations.

There is an appropriate saying for this situation. It goes like this:

"Think big and your deeds will grow. Think small and you will fall behind."

Placement for Farm Experience, What it is

Placement for farm experience is locating a student on a farm (or ranch) for experience in farming (or ranching). If a student desires experience in farming which he can not get at home (or on a school farm) he may be placed on a good commercial farm for experience if proper arrangements can be made. The placement is not just

In many commu- for working on the farm, though such work may have value. The farmer, as well as the teacher, must be concerned with the student learning from farming. Placement for learning a farming specialty apply to dairying, commercial poultry, vegetable or apple production, hog production, tobacco production and the like. Placement for farm experience can provide good experience commercial farms for many students preparing for off-(good ones) on which there are no farm agricultural occupations that require knowledge and skill in farming.

Responsibilities of Parties Involved in Placement

The teacher has definite and important responsibilities in placing students for farm experience. His first responsibility is to judge the reality of the placement for farm experience from which the student may learn. Students should not be placed for farm experience if they are merely to work on the farm. The teacher should make certain that suitable facilities and equipment are available and that there is good farming going on. He must make quite sure that the learning situation for the student will be good.

Responsibility of the Farmer

Placement for farm experience is a misnomer if the farmer is concerned only with getting the work done. He must be interested in the student and what he is to learn. He should be willing to enter into an agreement and to cooperate in developing a training plan for the student which will help the teacher. The teacher must be welcome on the farm. However, he should not interfere with the work of the student or the farmer.

MCEMBER, 1971

Student Responsibility

The student must be mature enough and willing to assume responsibility under direction. The student must be willing to work at the convenience of the farmer when he might have fun doing something else. The student should want to learn what he is supposed to learn, and be willing to use his time in learning how to perform the different jobs, before he does them on the farm.

Planning the Placement for Farm Experience

The training plan and placement agreement, worked out cooperatively by the student, the farmer, the parents, and the teacher should include the kinds of jobs the farmer will allow the student to perform on the farm. Many of the jobs to be performed should deal with improved or approved practices in farming. The student should have opportunity at school to secure knowledges and understandings needed to perform the jobs in the training plan before he performs them.

Recording and Evaluating the Placement for Farm Experience

The students should keep a record of the jobs and responsibilities he carries out on the farm, and of the degree and extent of the experience. The student and the teacher should evaluate with how well the student learned the different jobs. The student will also want to keep a record of his hours of labor and his earnings.

The teacher should develop ways of evaluating the accomplishments of students placed for farm experience. The following types of evidence may be used by the student in evaluating placement for farm experience:

Improved or approved practices learned:

Management decisions discussed or helped make;

New skills learned; Habits learned;

Attitudes developed;

Evidence of honesty and dependability developed;

Achievements in terms of training plans.

The teacher should evaluate the

farm-placement situation, by answe such questions as:

- 1. Did the farmer cooperate
- 2. Was he fair to the student?
- 3. Were there opportunities for student to engage in many of the tivities in farming?
- 4. Did the farmer use good train procedures?
- 5. Did he stress safety with the

An objective evaluation of the plan ment situation by the teacher is a n as a basis for determining the ability of placing other students the farmer. The opportunities placement for farm (ranch) expe ence will be greater in the future the now. The need is clear. Farmers need the help and students need the train ing. Many students preparing for as cultural occupations need to have go experience in farming. The experience should be secured on good, w operated commercial farms. The train ing resources are there. The teacher job is to capitalize on these uni resources.

We have had a steady increase in arollment, although there has been garticular increase in overall school and two years ago, the land had only two vocational prograins, agriculture and home econom-Two years ago, when an auto

sechanics program was instituted, voaugual agriculture enrollment conto increase. Last year, when ded to the vocational curriculum, here this is because with two teachwe had been able to expand our agricultural employment.

A Sterling vo-ag student has two greens when he becomes a senior. He choose between production agrialune or agricultural occupations.

Another advantage of a multiple eacher department, particularly one for individual training and counseling. is is easier to arrange time for indisectional students when there is another macher available to carry on the regular routine.

However, a multiple teacher department is not the panacea.

For one thing, the shop is in operafold up easily under a half-day sched-

operations. Drills and grinders not designed for heavy duty wear out rapidly. Maintenance is more extensive and more difficult. We now buy heavy duty industrial equipment and make certain that the equipment can be serviced promptly.

In a multiple teacher department. an instructor does not have the freedom to operate which a teacher in a body repair and electronics were one-man department enjoys. He must take the other teacher(s) into conenrollments increased again. We sideration before he makes any decisions or plans.

A teacher in a team situation finds he cannot participate in all phases of instruction. It takes longer for him to become well acquainted with all the students, their backgrounds and their problems. This is probably the biggest single disadvantage to sharing the work with another instructor.

Operation of a multiple teacher department requires more planning than with a large enrollment, is the fact that in the case of an individual teacher s teacher is more available to students department because major decisions must be made in advance and by mutual agreement.

We developed a policy statement, working together and with the assistance of our advisory committee. This was then submitted to school officials for approval.

This statement makes a specific diton the entire day. Certain makes of vision of all responsibilities. Mr. Buesselding machines, for example, which cher, as head of the department, has responsibility for the overall operation ity of instruction and provide approbreak down under a full day's of the program. He prepares and sub- priate training for every student.

mits all reports. Mr. Hettinger is specifically responsible for Young Farmer classes and activities. The department head conducts the adult education program. He is the advisor for the FFA chapter with the assistance of the second teacher.

Despite certain disadvantages and inconveniences which an individual ag teacher doesn't experience, we believe that the multiple teacher concept is good, and we prefer it. It presents a greater challenge to the teachers and a greater opportunity to develop their skills. At the same time, a teacher is relieved of some of the work load, particularly that part which suits him the

We feel that the reason this program has worked for us is that we enjoy working together and have found that we can resolve any differences without argument or antagonism. It would never work with teachers who cannot get along together.

With fewer young people going back to the farm, a high school vo-ag department must diversify to provide for those whose best opportunities lie in off-farm agricultural occupations. Unless the department is a very small one. or a part of the training can be farmed out to a community college or area school, more than one teacher will be required in order to maintain the qual-

TEAMWORK-THE KEY TO SUCCESS IN MULTIPLE TEACHER VO-AG DEPARTMENTS

Hillary Buescher Agriculture Department Sterling High School Sterling, Colorado

Dale Hettinger Agriculture Department Sterling High School Sterling, Colorado

After more than two years experience, we are completely sold on the concept of a multiple teacher vocational agriculture department, providing the teachers are compatible and are free to develop team teaching techniques. Two teachers can do many things together which two teachers cannot accomplish alone.

For instance, our program is very flexible because we use the team approach. Whenever it benefits the instruction, we trade classes, so that a teacher is working in his area of greatest strength.

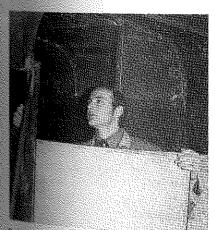
For another thing, each teacher can concentrate on fewer areas of instruction, because we have been able to divide the work according to individual teacher's interest and specialization. This improves the teaching techniques of both teachers and gives more time for preparation of specific

Very often we combine our efforts in a team teaching approach. One teacher will conduct a demonstration, while the other lectures and explains the procedures which are being demonstrated.

We have been able to expand curriculum to include agri-busi training for students who will not into production agriculture. We his also added courses in farm mana

We have divided each class morning and afternoon sections. cause there is a choice of sections is easier for a student to coordinate vocational agriculture with his to education program. This division a keeps our shop in use throughout b day which reduces the per-student of the facilities.

THE AGRICULTURAL EDUCATION MAGAZIN



Posts Hettinger examines the workmanship of lystock trailor being made by Norman as a vocational agriculture shop project.



Hillary Buescher explains the judging of grain samples to a group of Ag III students



Dale Hettinger fits Gene Miller's steer as Hillary Buescher (left) explains the process to a group of Ag II students.

THE TEACHER AS A MANAGER

Robin R. Schade, Director Operational Enterprise Center for Planning and Development American Management Association, Inc. Hamilton, New York



of educational endeavors can be enhanced by emulating the procedures and techniques common to the business world. Properly applied management princicilitate the attain-

ment of specific instructional objectives, according to the project director of Operation Enterprise, American Management Association.

Teachers do not normally think of themselves as managers. The term usually brings visions of a successful businessman. School teams, however, also have "managers." The educational ful businessman. In education, the term management is too often used only to refer to the term administration. Recent efforts to organize teachers tend to reinforce this concept because both the human and physical resources. traditionally negotiations are between labor (teachers) and management (administrators). A much broader concept of management is needed. An institutional goals and objectives. In examination of the management process reveals a number of principles which. if properly applied and executed, could make the teacher's job more effective teacher must still determine what the and could put his work into new per-

Management, simply defined, is getting things done through people. This definition fits nicely for managers in cides upon appropriate methods to be business. Their role is to "manage" people in the making of "things" and get such products into the marketplace cess, however, has an advantage in that at a reasonable profit. However, this the teacher is forced to think about the concept is far too narrow. Wherever method from the student's viewpoint. student" could be a success at learner something is to be accomplished, prop- For example, from the student's point something which he could see was well erly applied management principles of view, the teacher might dismiss greatly facilitate achievement. This "listen to a lecture about such and broadened concept holds true not only such" when other methods may be for the businessman, but for doctors, much more effective.

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The effectiveness lawyers, teachers, and individuals who manage their own affairs. The teachermanager's job is to achieve learning the manager in business, the step is through and by his students. The teachers even has a profit motive study should result in reasonable profit or increase in the student's knowledge.

There are seven basic steps in the management process: planning, organples will greatly fa- ization of people, organization of things, performance standards, measurements, controls, and rewards or incentives. The application of these steps in managing the educational process can lend much to the effectiveness of the educational enterprise.

The manager's first step is to determine what he wants people to do. Most teachers are well aware of the need for careful planning. In the manager is little different from the planning process, goals and objectives professional manager and the success- are established. This first step determines where to go. Proper planning gives direction to the remaining management effort.

> The manager must then organize These steps are used to determine what people are needed and what they themselves need in order to accomplish the case of the teacher-manager, the people, in numbers, are already determined by class enrollments. But the students should physically and mentally do, just as the businessman assigns tasks to his employees. In this part of the management process, the teacher deused by students to accomplish specific individual differences can facilitate objectives. Using the management pro-

Determining what the people the selves need is extremely important, P. cludes decisions about buildings, n chinery, raw materials, etc. For teacher-manager, this means identify and organizing physical resources while will facilitate attainment of education objectives. Besides textbooks, these w include all the materials which assist the students in learning as achieving objectives. In fact, this mas prove to be helpful in gaining necessar financial support when presented school officials in terms of the comple management plan.

The fourth step in the manager process is to determine how well people should perform, "Standards of per formance" are widely used in manage ment development programs, The teacher-manager can effectively use the step to improve student performance The teacher should detail clearly what each student is expected to learn. So dents should know what represen outstanding achievement, as well the various levels between poor as outstanding. Students should und stand what constitutes minimum formance. This requires discussion a cannot be accomplished by "we going to learn about the world," or passing out a sheet which lists course objectives. A great deal of interest and motivation can be developed in

Application of this principle co mean a great deal for the underachies and slow learner. Recognizing su establishment of realistic standards a tuned to individual ability. Possibly his first time in school, a "prob in his grasp.

The fifth step is to determine her well people are doing. For the teach this is evaluation, another well-know

tep in the educational process. For remagers, this means a progress review subordinate performance. If "stanlants' have been established and comannicated to the students, this step greatly simplified. Obviously, if the undents know precisely what is expectd they will know themselves how well have achieved in terms of the objectives and established "stanhards' Again, this means additional etention given to students, not merely essing out graded tests. This should notive periodic individual appraisal in of the standards established for sti snident.

develop these abilities to the fullest and that there is a great deal of overlap

potential. In management, this is coaching, teaching, training, etc. This constitutes the largest part of the teacher's job and more of a good manager's job than most would realize. The teacher must continuously strive to assist, help and coach the students so that they will achieve instructional objectives.

Finally, one must determine what people should be paid. In business, this step includes financial and non-financial remuneration. For the teachermanager, this may mean assigning grades and various forms of recognition as a form of "pay".

It is apparent that these steps are Step six must enable individuals to not necessarily followed one by one

in the application of each. However, the management process in business has been rather successful. Perhaps similar success can be attained by applying the same techniques in management of the educational enterprise. Using this concept does not change anything that the teacher traditionally has done, it merely re-emphasizes and re-directs teacher effort. Without doubt, there is room for a great deal of improvement in the management of classroom and instructional endeavors. The teacher should adapt management skills to the classroom, for he is truly a manager of

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RESOURCE IDENTIFICATION: AN IMPORTANT **KEY TO IMPROVING INSTRUCTION** IN MULTIPLE TEACHER DEPARTMENTS

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Would you like to know where you can easily identify and obtain over 800 economically priced and ready-to-use instructional materials for vocational agriculture classes? Would you like to know

about instructional materials that are in the planning and **exclopmental stages?

Improved curriculum and new inseactional media are continuously wing designed and developed by rewarch centers, curriculum laboratories, and local schools across the country. The materials needed to broaden or improve your instructional program may already be available or in the developmental stages. Knowing where to effi-

the busy agricultural educator significant amounts of time for other activi-

Resource Identifiers

Many resumes of agricultural education curriculum studies and instructional materials can be found in Abstracts of Instructional Materials in Vocational and Technical Education (AIM) which is published quarterly by the ERIC Clearinghouse on Vocational and Technical Education.2 Many of these identify resources available from business and industry,

AIM announces the availability of completed and ready-to-use vocational instructional materials that have been contributed by sources throughout the United States. For example, there are at least 22 curriculum units or instruc-Cently identify these materials can save tional material laboratories which reg-

uarly contribute materials for inclusion in AIM. The fine cooperation and contributions from these sources, as well as others, have resulted in the announcement of 3,041 new and revised vocational instructional materials in the first twelve issues of AIM.

Over 800 of these publications were specifically developed for use in vocational agriculture classes. The balance includes instructional materials developed for other vocational fields. Many of these items may be useful for vocational agricultural instruction, particularly those from distributive education and trade and industrial education. Entries in AIM provide complete information and industrial education.

Since time is a precious commodity, efficiency in locating materials can be attained by reading resumés of publications. Reviewing resumés can help one decide whether a publication is of suf-

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ficient interest to warrant acquisition of the full text. The full text of all publications is available either from the original source or the ERIC Document Reproduction Service.

Assistance on the use of the ERIC system may be available from your state vocational education research coordinating unit (RCU). Many RCU's have the ERIC microfiche collection and offer information services.

An effort has been launched by Vocational Instructional Materials (VIM), an affiliated organization of the American Vocational Association, to increase communication among developers and users of vocational instructional materials. VIM collects information about instructional materials which are being planned or developed by curriculum laboratories across the country. This information is transmitted to VIM members through a periodic newletter. As a part of the New and Related Services Division of AVA, the VIM organization tripled in membership during the past year. VIM encourages its members and others to send instructional materials to the ERIC Clearinghouse on Vocational and Technical Education for possible inclusion in the ERIC system.

The challenge to broaden and renew vocational agriculture instruction is a continuing one. Agricultural educators can make significant strides toward meeting this challenge by exploiting available information resources. At the same time, all agricultural educators may share their materials with others by sending copies to the ERIC Clearinghouse for possible inclusion in the ERIC system.

¹Subscription: \$11.00 per year, \$18.00 for two years, or \$27.00 for three years. Order AIM from ERIC Clearinghouse, The Center for Vocational and Technical Education, The Ohio State University, 1900 Kenny Road, Columbus, Ohio, 43210. Subscriptions may be back-ordered to as early as the Fall 1968 issue.

²The ERIC Clearinghouse on Vocational and Technical Education is one of twenty clearinghouses in the ERIC system and it is also a component of The Center for Vocational and Technical Education located at the Ohio State University. The Educational Resources Information Center (ERIC) is a national information system designed and supported by the U.S. Office of Education for the purpose of providing ready access to results of educational research, research-related materials, and other sources of information that can be used in developing more effective educational programs.

A GOOD QUESTION

Benton K. Bristol Department of Agriculture Illinois State University Normal, Illinois

Albert Einstein is reported to have represented slightly more than 18 pe said, "If you want to know what sciencent of those surveyed in their occurs tific method is, don't ask a scientist tion. The letter-questionnaire mine but watch what he does." The same may be true of creativity and the creative person. The results obtained so far from asking a single question of thousands of cooperative people supports his idea.

A part of the study involved sixtythree answers received is reply to the following letter:

"I am conducting a study which involves the evaluation of creative talent. As part of the study I have been asking the following question of many creative individuals:

What is the most creative thing you've ever done?

So that the field of agricultural education may be included in the study, I am sending this letter to all persons listed in the AATEA 1970-71 Directory of Agricultural Teacher Education Personnel in the United States.

I hope you will answer the question for me, and will appreciate any help you are able to provide. Any additional information about your creative activities will be most welcome, but first please describe what you believe to be your most creative accomplishment."

All who answered the question performed several significant actions. Each one read the letter, analyzed it, decided it was worth answering, thought seriously about what the question meant to him, decided what the answer should be, put it in writing and sent it on.

A genuine interest in creativity was exhibited by the respondents. They

graph was intentionally vague, and follow-up was sent except in respons to specific questions asked by recipient In the case of the experiences, we educated adults represented in a study, it would appear that a reinterest in the subject is an essential characteristic for the more creative in dividual.

Some of the other creative cha acteristics exhibited by those who che to be included in the study were:

1. They thought of themselves being creative, and as being able make a worthwhile contribution, Son did not admit this, however, and few even denied they were creative despite evidence which would indicate otherwise. The sad fact is that through out their lives sensitive, imaginative and innovative people may have been rather consistently discouraged by those wit less creative ability.

2. They were intrigued by the chall lenging and/or tough question. As long ago as 1952, L. L. Thurstone though his most promising student (creatively) was the one who "seems a little is trigued by a queer proposal. He to with the idea and tries to imagine

The child-like qualities of play, wor der and willingness to experiment we referred to quite often at the 16th and 17th Annual Creative Problem-Solvins Institutes, Buffalo, New York,2

3. They were not bothered too much by the lack of directions provided, be sensed they were to supply the mism

formation required for answering the The creative person is able function without having everything and explained in detail. He has greater ability to overcome difcultures, and the confidence necessary doing so. S. I. Hayakawa quotes Low as saying, "The fully-functionpersonality can be, when the obenive situation calls for it, comfortably conderly, anarchic, vague, doubtful, rectain, indefinite, approximate, in-

4. They proved they were doers, not concerned about what others and think about their replies, not desirely afraid of making mistakes, willing to try something different, 1 Stein in 1962 enumerated the characteristics of creative individuals so found in the studies of the creative delt. Some of the characteristics were sufficient, less inhibited, independent openness to feelings and emomore subjective, vitality, and enthusiasm.4

This researcher was delighted with if the replies received. On the basis of the examples which follow, see if om agree.

Example 1. This answer could take many different ways. I don't think I un unique, but I take pride in my four children whom I helped create with the help of my wife and God. All four bus completed college. Three are marand I think have established hapby well-adjusted homes. The fourth, and voungest, just graduated from colless last March and appears to be besoming established in the business world. Already he is successful . . .

In the professional world I think the west creative thing I've accomplished a to direct a survey of the agricultural education offerings in Thailand, then essperate with my Thai counterpart is the preparation of a report. We the establishment of a set-high school level vocational trainprogram. Based on our report, four seational centers were established in staphical regions of the country in When I visited the country in 1967, all four were successfully in operation. When established, the people in suthority considered our projections bold, did not include all the areas recommended, and cut the enrollment

of the four areas recommended in our report was included, and enrollments in some branches were beyond our projected figures. This project was one of the more successful endeavors of A.I.D. in the country until that time.

In my personal life I think I can point to three things.

In my religious activities, . . . being a member of a small group that determined the need for a church in a growing suburban area and working and making financial contributions which appeared at that time as sacrifices. I was a part of the formation of the first new . . . congregation in over a quarter of a century. In less than 15 vears, over 3/4 million dollars was invested in the church facilities, and the membership has grown to over

In my community service I served one term as Mayor of a growing suburb. During that time many of the proposals I advocated were turned down as too advanced. But 10 years later every one of the issues on which I had campaigned had been adopted. During my one term I initiated and had adopted a zoning ordinance, a building code, civil service for employees, established a full-time police force, and constructed the first phases of a municipal sewer and water system.

In my civic contributions . . . my

greatest contribution has been through Kiwanis . . . have served my local club . . . been a District Lt. Governor . . . now District Chairman of the Vocational Guidance Committee and a candidate for Governor of the District next year. As a Kiwanian I work each week with the Blind Bowling League of . . . my wife and I pick up blind bowlers and return them to their homes, help set up the guide rails to assist the blind bowlers, keep score for them, and attempt to give them assistance in their bowling. My life has varied. Earlier when I had children of that age, my wife and I were active in 4-H. . . . I received one of four citations in the State for my contributions to 4-H one year. I have served as Boy Scout and Cub Scout Leader . . . etc., years ago.

It would be difficult for me to state which has been my greatest contribution, but I have indicated the highlights of my personal, professional, many instances. By 1967 every one family, religious and civic contributions.

Example 2. I allowed an individual who was very close to me the freedom to do anything the individual wanted, so far as our relationship was concerned — I gave the individual complete freedom - when I didn't need to — Both of us blossomed.

Example 3. It is rather hard to pin point the most creative thing that I have ever done. If I boil them down to one, perhaps it would be developing an electrical teaching aid . . . This teaching aid is used in all our departments of Agricultural Education in ... and in several adjoining states . . . Kind personal regards.

Example 4. . . . I assume that you are interested in the response with regard to the professional field of agricultural education. If not, I would have a different reply. In the latter case, I would have to say it would be when I did the staging of the musical "Oklahoma" in a high school where I taught agriculture.

Professionally the most creative thing I have ever done is to develop a new way of building pre-service educational experiences for agricultural education. This is in the process of taking place currently with teacher and college student participation. As yet, there has been no published report of this work. Hopefully, within the next year this will take place.

Example 5. Establishing the "Theme Approach" to Agricultural Education Magazine in the period of my editorship. This resulted in increased productivity of the profession and interest of readers.

Example 6. . . . My answer would be "Building teaching plans, not plans to teach subject matter, but plans to teach students."

Example 7. . . . After an assessment of the strengths and weaknesses of vocational agriculture in the public schools of the nation, I reached the conclusion that our adult education efforts, to really help the man on the land, were wide of the mark.

We were busy teaching many things,

some of them useful. But we had failed to zero in on the really important questions facing an operator of a farm busi-

In an effort to develop an instructional program we secured a grant from the . . . Foundation to initiate teaching programs that would provide farm business operators with information that would help them answer these questions.

As of 1970, the farm business management instructional program has become an integral part, the basic element of the vo-ag adult instructional effort. Let it be understood that I do not take credit for the development of the program. In all modesty, however, I believe I can take some credit for the "creative" idea.

At this point it seems appropriate to remind the reader that an important part of the creative process depends upon how well the receiver receives. The perceptive reader will have recognized creative characteristics not mentioned previously which are possessed by the individuals represented by the examples. Two of the additional characteristics are modesty and dissatisfaction with the status quo. There are others which those who wish to experience "the fun of discovery" on a modest scale can determine. Participation is an essential part of either developing or evaluating creative ability!

As the title of this article indicates, "What is the most creative thing you've ever done?" is A Good Question. The respondents have made it so.

¹Parnes, Sidney J. and Harold F. Harding, A Source Book for Creative Thinking, Charles Scribner's Sons: New York, 1962,

2"To Make a Difference in Five Days" by Thelma F. Grube, The Journal of Creative Behavior, Vol. 5, No. 1, First Ouarter, 1971, pp. 74-75, is one person's views of the activities experienced at the Institute, An article in the same Journal is "Observed Creative Characteristics as Recorded in One Book" pp. 1-6.

³Hayakawa, S. I., Symbol, Status and Personality, Harcourt, Brace and World, Inc.: New York, 1953, p. 53.

⁴Stein, M. I., Survey of the Psychological Literature in the Area of Creativity with a View Toward Needed Research, U. S. Office of Education Cooperative Research Project No. E-3, New York University, N.Y., 1962.

TEAM TEACHING AT MINOT, NORTH DAKOTA

Gerald Iverson Agriculture Department Minot Senior High School Minot, North Dakota

The staff at the Minot Senior High Vocational Agriculture Department uses a total team teaching concept. We do not divide our classes among the staff or teach units individually as many of the multiple staffed departments do. We believe that more students can be reached more efficiently, that we do a better job, and strengthen our program through our united efforts. Our goal is simple; to develop a vocational program in our community which will meet the needs of students with agriculturally related occupational objectives.

Team teaching means many things to both the instructor and the students. When the entire curriculum is team taught, all instructors must be thoroughly familiar with the lessons for each unit. Students receive more individualized instruction with two men in the classroom. While one instructor is leading a class discussion, the other is free to answer questions and assist the students. Instructors may take advantage of their speciality fields and use them to supplement the unit. Due to the increase in student contact, this system all but eliminates discipline problems. Class loads may be efficiently increased, but care must be taken not to defeat the main purpose. The instructors draw from each others' experiences and relate them to the teaching.

During shop instruction and demonstrations the instructors may specialize. For example, while one instructor teaches acetylene welding, the other teaches the arc section. Safety standards must be observed as the instructors of a multiple teaching staff branch out in different directions. They meet more

people, make more contacts, and seem additional support in the communication Evaluating a team teaching situation a constant process. While working to gether the instructors may offer each other constructive criticism.

With team teaching it is necessar that all instructors stress community is volvement, not only for the FFA other parts of the program, but for themselves. It is through involvement that the community becomes aware of what vocational agriculture is doing Teachers of vocational agriculture must always be prepared to address service clubs and other organizations.

Besides normal community involve ment, the Minot vocational agriculture instructors are members of the Agricul ture Committee of the Chamber of Commerce. Minot, as host for the North Dakota State Fair, gives us ad ditional opportunity to serve as Superintendents of the Mechanics Division and the Youth parade.

We do not operate under involved complicated concepts; our philosoph and ideas are simple and to the point

- 1. Agriculture is North Dakota and will remain so through the efforts of Vocational Agriculture.
- 2. Student recognition is not one healthy, it is essential.
- 3. No new idea is so good that cannot be improved through co operative team thinking.
- 4. Students often need more hell than we are aware of.
- 5. If all men were created equal that equality ended at creation

THE PROGRAM

The Minot Vocational Agriculture rogram is similar to many of the prothroughout the state. We try to actude as many occupational programs possible. Our supervised occupaespai experience programs are coupled ath our cooperative program. In addiemphasis is given to providing for the students who need addiional opportunity to develop necessary tills essential to their vocational obectives. We prefer not to refer to these and ents as disadvantaged, but let's call a made a spade, as the majority of our grassigned time is spent working with new people.

Our present high school program is et up as follows:

- A Semester Courses
 - I, Ag, Power
 - 2 Ag. Welding and Production
 - 3. Ag. Business
 - 4. Ag. Construction
 - j. Ag. Conservation and Surveying

B. Full Year Courses

1. Ag. One

2. Ag. Two

The Minot Vocational Agriculture program includes two adult welding courses, each unit consisting of fiftyfour hours of instruction for between twenty-four and twenty-eight adult farmers and other interested persons.

Groundwork is presently being laid for an adult Farm Management-Record Analysis Unit, as well as a unit of Structures and Rough Carpentry.

EVALUATION

Our graduates are yet too young to be evaluated in terms of economic progress if that is to be the criterion. None of them have completed their post-high school education, several are members of the Armed Forces, some are farming; but two years is too short a period in which to evaluate our sys-

There are changes in the support received by vocational agriculture in Minot. The enrollment demand for best, we pledge ours.

Vocational Agriculture has tripled. We had seventy-one students in 1969; we have two hundred and twenty-six registered for this school year. All Vocational Agriculture classes are filled to capacity, with sixty-four Freshmen in one section and forty in another. Vocational agriculture is growing in our community and we aim to keep it that way. For the first time the blue and gold FFA jacket is worn by members with the same pride ordinarily reserved for the lettermen's jacket. Service clubs and other organizations in the community ask for young FFA men of blue and gold, to give demonstrations of parliamentary procedure and to discuss with them what the vocational agriculture program means to the future of this community. Vocational agriculture receives community-wide acceptance. The people of this community appreciate all phases of vocational education. Vocational agriculture alone cannot take credit for this community appreciation, but because we receive their

MULTIPLE-TEACHER DEPARTMENT SERVICE NEEDS



E. E. Kee Department of Agriculture Lexington High School Lexington, Tennessee

McCall Lewis Agriculture Department Lexington High School Lexington, Tennessee



The courses offered by the Vocation- ment; and (4) possibilities for course al Agriculture Department at Lexing-10n High School are a result of cooperative efforts of the instructors, the visory staff, and local officials.

ating a course lies with the local agriculture teachers. They must determine 1) community needs; (2) courses of study to meet student needs; (3) faciliavailable and needed in the depart-

integration.

The school service area is dependent to a large extent on servicing the full high school principal, the state superand part-time farmers' needs, although industry has moved in to lend balance. Timber resources offer considerable The primary responsibility for initi- employment. With the development of the Beech River watershed, recreation is becoming increasingly important.

> Listed below are courses and division of responsibility by instructors for the school year 1971-72:

Course Offerings for 1971-72 1. AGRICULTURAL SCIENCE I

A. Instructor: Parker Agricultural Science I and agriculture-related arithmetic are given back-to-back for those students classified as disadvantaged. Training in fundamentals of leadership, record keeping, introduction to basic crop and animal science, and shop skills is offered. Either a supervised farming pro-

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gram or supervised work experience is required. The courses are offered for one hour with one credit being given in each course. Each class is limited to 20 students. This course is a prerequisite to Agricultural Science II.

B. Instructor: Ledsinger This course is offered to regular freshmen students and includes training in fundamentals of leadership, record keeping, introduction to basic crop and animal science, and basic shop skills. Either a supervised farming program and/or a supervised work experience is required. The course is offered for one hour with one credit given. Each class is limited to 25 students. This course is a prerequisite to Agriculture Science II.

2. AGRICULTURAL SCIENCE II

A. Instructor: Ledsinger

This course is offered to a limited number of students who are disadvantaged. It consists of developing skills in leadership activities, record keeping, a pursuit of basic knowledge in crop and animal science, with emphasis being given to shop skills. Either a supervised farming program and/or supervised work expericence program is required. This course is offered for one hour with one credit being given. Class is limited to 20 students. This course is a prerequisite to Junior agriculture electives.

B. Instructor: Kee

This course is offered to more advanced or regular students who would receive additional training in leadership abilities, record keeping, along with pursuit of knowledge in basic crop and livestock science, and further development of shop skills. A supervised farming program and/or supervised work experience program is required. The course is offered for one hour with one credit being given. Classes will have 20-25 students enrolled. This course is a prerequisite to Junior options.

3. SPECIALIZED AREAS

A Farm Mechanics I. Instructor: Lewis

This course offers training in basic electricity, wiring, plumbing, major farm construction projects, and leadership. It is primarily designed for those students who plan to become an apprentice in a trade or enroll in a vocational-technical school for additional training. The course is limited to 20 Junior vocational agriculture students and is a prerequisite to Farm Mechanics II. The course will be offered two hours with two credits given.

B. Farm Supplies I, Instructor: Lewis

This course gives training to approximately 20 Junior vocational griculture students in leadership, salesmanship, business operation and opportunities, and advanced shop skills. It is offered and is a prerequisite to those students who plan to take cooperative on-job training as Seniors in preparation for employment in some phase of the farm service field upon graduation from high school. The course will be offered two hours with two credits given.

C. Production Agriculture (Junior Course). Instructor: Kee

This course is for approximately 20 Junior vocational agriculture students who plan to become farmers, part-time farmers, or professional agriculturists after high school. Training will be offered in intensive leadership activities, record keeping and analysis, soil and water conservation, agricultural economics, crops and livestock production management, and more advanced shop skills. A supervised farming program and/or supervised work experience program will be required. The course will be offered one hour with one credit given. This course is a prerequisite to Senior Production Agriculture.

D. Farm Mechanics II. Instructor: Ledsinger

This course will be offered to approximately 20 agriculture Seniors who are looking toward work in an agricultural service field, an apprenticeship in a trade or attending a vocational tech nical school for further training Training will be offered in main tenance and repair of small me tors, assembly, operation, and repair of farm machinery; na chinery parts; and leadersh training. Course will be offere two hours with two credits being

- E. Farm Supplies II (Co-op Students). Instructor: Lewis This on-job training experience program is for 15-20 Seniors who will schedule at least three hour employment in a farm related business for at least 15 hours week. Training is offered in sales. manship, machinery, assemble operation and repair, welding parts service, business operation etc. This is for those Seniors wh plan to go immediately into the farm service field upon gradua tion. Two credits will be given in Cooperative Education,
- F. Production Agriculture (Senio Course). Instructor: Kee This course is designed for 15.2 Seniors who are primarily in terested in farming or becoming a professional agriculturist after further training beyond high school. They will be offered training in advanced leadership activities, agricultural economics farm management and planning and advanced shop skills. A supervised farming and/or supervised work experience program is required. The course will be offered for one hour and one credit will be given.

A plan has been submitted to the high school principal proposing course in Agricultural Resources to be added to the Department's offerings This could be accomplished by reducing the Freshman classes to four and the Junior Farm Supplies I class from a double to a single period. It has met favorable reaction and will prob ably begin with the school year 1972 73. The course is planned to train students for assistant technicians after high school or to pursue studies in agricultural resources in a university

PIONEERS IN AGRICULTURAL EDUCATION

RUSSELL W. CLINE

Carlos H. Moore State Supervisor Agricultural Education State Department of Education Phoenix, Arizona





that for many years Russell W. Clinc. Frequently, this was

the only light in the building, for "Doc," as he was affectionately known by his friends, never believed in an eight-hour day for himself or his students, Agricultural education was his life and no man was more dedicated to his career. A perfectionist, he set high goals for himself and he did not accept a partial, half-hearted effort from his students. Those enrolled in his classes, not dedicated and motivated, were not encouraged to hang around, "Doc" did not want to send inferior teachers into our schools. He insisted that prospective teachers of vocational agriculture meet a higher the University as a whole.

Dr. Cline was born on December 6, 1899, at Newton, North Carolina. He carned the B.S. degree at North Carohas State University in 1924, the M.S. degree from Virginia Polytechnic In-

He taught in the Alexander-Wilson School, Graham, North Carolina, for two years. After one year as a fellow

When I drive State College as assistant supervisor of through The Univeragricultural education. He later moved sity of Arizona cam- to the University of West Virginia pus late at night, I where he spent eight years as a critic still expect to see the teacher, instructor in education and familiar light shin- teacher trainer. In 1937, he was aping from the office pointed to the faculty of The University of Arizona as Professor and Head was occupied by Dr. of the Department of Agricultural Education, a position he held until his death, August 3, 1965. Dr. Cline's association with agricultural education spanned all but three years of the life of Vocational Education as envisioned under the Smith-Hughes Act. His own professional growth, therefore, was concomitant with the development of Vocational Education in the United States. He and other great educators have proven the value of Vocational Education not just as training for jobs, but as an enlightened educational experience which has served equally well as the more traditional college preparatory programs for those who choose to pursue higher education.

His 29 years at The University of stade point average than required by Arizona were fruitful. A tribute to Dr. Cline was the remark, "He could make you think." He repeatedly emphasized there is no such thing as a terminal course or terminal education. His subtle influences upon the philosophy of the individual students were apparent. stitute in 1927 and the Ph.D. degree Using accomplishments of former stu-The Ohio State University in dents as a measure of teacher success, Doc has earned his place among the great educators of his time. An impressive list of graduates includes successful secondary and post secondary teach-Virginia Polytechnic Institute, he ers, department heads, state supervisors the faculty of North Carolina of Vocational Education, school admin-

istrators, lawyers, and at least two prominent medical doctors.

Early in his career he was recognized among his colleagues in the field of agricultural education as one of the most knowledgeable persons in the profession. He possessed a high degree of loyalty to the people for whom and with whom he worked. He was a great supporter of the total University program, never did he belittle any aspect of other departments. Likewise, he stood behind Vocational Education in the state and nation with all his strength. The teachers of agriculture and the students in the Arizona Chapters of the FFA were his special delight.

"Doc" did not strive for personal recognition but devoted all of his attention to his profession, and his character was above reproach. He was reserved in his attitude toward people, tended to keep his own counsel, yet he was a very friendly person. He recognized shortcomings, yet he invariably emphasized the good points of the individual.

Dr. Robert E. Taylor, Director of The Center for Vocational and Technical Education, The Ohio State University, a former student, had this to say about his old friend: "R. W. Cline was a man for all seasons. That is, in this modern age he truly represented and typified the renaissance man. He possessed an extremely keen mind, a sound philosophy, clear-cut goals and objectives for both the teacher and the student. Perhaps one of Doc's strongest suits was his emphasis on program planning and the

importance of deliberately trying to change individual behaviors and to alter and improve the agriculture of a community through sound, wellplanned teaching-learning programs. He would be a contemporary in our current setting with its emphasis on behavioral objectives and relevant instruction."

Dr. Cline received many special recognitions, including The Service Award from the National Vocational Agricultural Teachers Association; The Honorary American Farmer Degree from the National FFA Organization; the Distinguished Service Certificate, U.S. Office of Education; the Honorary State Farmer Degree, and a special Recognition Plaque for outstanding contribution to the Arizona FFA Association.

Perhaps these words by William James best summarize the life and philosophy of "Doc" Cline: "The great use of a life is to spend it for something that will outlast it."



Four of the nine representatives of the OE Advisory Committee, elected to summarize the report of the National Seminar on "Agricultural Education in Transition" held in Denver, May 11-14, 1971, met on Sept. 3 with Dr. Sidney P. Marland, U.S. Commissioner of Education, along with other members of the com-

Included in the above picture are left to right: Mr. Glen D. McDowell, President, National Vocational Agricultural Teachers' Association; Dr. Lloyd J. Phipps, Chairman, Department of Vocational-Technical Education, University of Illinois; Dr. Sidney P. Marland, U.S. Commissioner of Education; Mr. C. M. Lawrence, Vice President, Agricultural Education Division, American Vocational Association; and Dr. James T. Horner, Chairman, Department of Agricultural Education, University of

Dr. Marland was much impressed with the work which the committee is doing and with the procedure which has been followed in developing guidelines for Career Education in Agri-business and Natural Resources for the next decade.

PROCESS MODEL FOR USING RESULTS OF COMPETENCY STUDIES

Douglas M. Carty Cummings Heights Abingdon, West Virginia



Competency studies completed in agricultural education range from farmer to feed store employee. This illustrates a widespread belief that such studies are necded.

The United States Office of Education listed the following objective, among others, for vocational education in agriculture: "To develop agricultural competencies needed by individuals engaged in or preparing to engage in agricultural occupations other than production agriculture."1

Noticably lacking from the literature are explanations of how teachers, supervisors, or others responsible for planning learning activities are to use the results of competency studies. Future revisions of professional textbooks should offer instruction in the techniques of phases of the teaching process.

Teachers who are revising programs need to be able to use the results of competency studies in planning curricula. The results of these studies serve as a checklist of objectives. Both students and teachers can use the results of such studies as a subject matter as well as a guide to the selection of subiect matter.

The results of competency studies should be used in planning occupational experience programs. Teacher and student alike can use such data to determine a program of studies to provide the student with specific abilities needed in an occupation or cluster of occupations. These purposes and uses should scrve as guidelines for the development of competency studies.

Review of Competency Studies

Previous to the appearance of competency studies in research, mu work was done with job analysis on-farm operations. Competency studi have generally been of two types. The first type is in reality job analysis wh the second attempts to identify knowledge, understanding, apprec tions and skills desired by employe or by an expert panel. Most studies a combination of surveys identifying tasks that employees perform identifying someone's opinion of a learnings needed to produce competen in the performance of some tasks, I studies or parts of studies that cent upon job analysis attempt to identify tasks or operations performed by ployees in the course of their work a leave to the teacher the selection objectives and learning experiences the will produce competence. The second type of study, however, attempts dentify for the teacher the learning needed to produce competence in task.

A review of several studies shows the the word "competency" appears in I Agricultural Education magazine early as the September 1964 issue who Homer V. Judge is reported by Glean Z. Stevens as having in progress a sta study of employment opportunities needed competencies in agricultus occupations other than farming.² R Agan, Teacher Education, Kansas Sta University, reported the results of study similar to several that have been titled as competency determinate "The employers were asked to see from a list of forty-six technical submatter areas the special areas of know edge needed by the workers."3

The first study reported in the ricultural Education magazine

with competencies was "Com-Needed in Country Elevator Maketing," by Mabon and Bundy listed comencies under two categories; underand abilities. The researchers the managers of businesses to asn a score to each of several items on william H. Hamilton and Clarence Bundy reported "Agricultural Com-

Retail Feed Business" using same method and scale as Mabon andy.5

in the March, 1965 edition of Agricultural Education magazine, Ceorge E. Yetman reported on "What Employers in Ornamental Horticulture want." He asked the respondents to his sestionnaire to check the degree of "udent" should have no skill, some or a high degree of skill in the

Harold Binkley in his article, "Com-Detencies Needed in Agricultural Supply rated competencies as very beloful, helpful, or little value and sited personnel to identify understandms knowledge and ability needed by

Warren Parsons in his study, "Train-Needs For The Greenhouse Growasked managers to indicate the secologe of "basic fundamental in-**marion" necessary for the greenhouse gover, competencies for the greenwas grower, crop understanding for the greenhouse grower and greenhouse management.8

As the emphasis on competency Monthication increased, twenty-four studies dealing with occupational opsetunities were completed in 1966-67.9

In the June 1968 issue Raymond M. Cark and O. Donald Meaders in "The Function Approach For Identifying Carriculum Content, Part II" reported weral studies. Among these were James Abracht's "A Process For Determining *** ational Competencies For The Performance of Essential Activities For The Sales Function By Sales Personnel In Feed Industry, and the Loci at Which the Competencies Could be laught." Albracht listed nine activities and then developed a list of "com-***incles (knowledge, understanding, abilities) needed to perform each We nine activities. 10

Identification of the Problem

researchers as to the identificaof the proper problem for investi-Webster defines competence as initiated by a competency study. quality or state of being functionseesledge, skill, judgement or strength

range of ability or capability."11

Should research identify the "indicated actions" and leave to the teacher the selection of the learning outcomes needed to produce ability or perform the actions, using the latest technical research and approved practices? Or should research identify the "sufficient knowledge, skill, judgement, or strength needed to perform?" The first approach appears to be a more manageable and valid problem for educational research. The second approach becomes more difficult and of less value due to the rapidly changing techniques and advancing knowledge in the agricultural industry and in technical research. People outside vocational education may have problems in relating specific job skills to training goals. There is little to indicate that employers have occasion to actually analyze the knowledge and judgments or understandings needed in the private sector of the economy to perform the tasks.

Model For Use of Competency Studies

While there are many other factors that influence the teacher's objectives, subject matter, and student activities, this chart of the process of determination of learning activities illustrates the value and use of competency studies based upon tasks performed.

Each phase contributes to the suc-

cceding phase(s).

Phase I

Competency (taken from a list of tasks identified by industry personnel)

> Phase II Teaching Objectives (learnings to be developed)

Phase III Selection of Subject Matter

Phase IV

Teaching-Learning Activities including Application and Evaluation

> Phase V Competence Developed In The Student

It can be seen from this procedure Evidently some confusion exists that the actual learning activities that the student will participate in become, in part, the end product of the process

adequate or of having sufficient adequate or of having sufficient cultural machinery service using a problem solving approach from Krebs, For

needed to perform an indicated action: More Effective Teaching 12 might be:

- 1. Competency: (information to be supplied by industry personnel through researcher).
- a. ability to lubricate a hay baler. 2. Teaching Objectives: (to be determined by teachers through study of current research and accepted practice)

To develop: a. understanding of metal to metal wear.

b. understanding of the action of lubricants. c. understanding of economics of

maintenance. d. knowledge of types of lubri-

cants. c. knowledge of the parts of lubrication apparatus.

f. appreciation of the value of a quality job of lubrication.

g. understanding of the operation of lubrication of apparatus.

h. skill in cleaning grease plugs and oil points. i. skill in attaching lubrication

apparatus. j. skill in operating the lubrica-

tion apparatus. k. understanding of the procedure used to locate lubrication points.

3. Selection of subject matter and teaching aids:

a. printed materials.

b. visuals and models. c. laboratory equipment and supplies.

4. Teaching-Learning Activities:

a. examining baler parts worn and scarred due to lack of lubrication.

b. discussion of importance of lubrication and identification of results of lubrication.

c. identifying student problems and concerns by listing "What we need to know to be able to lubricate a hay baler properly."

d. demonstration.

1. selecting lubricants.

2. selecting and setting up lubrication apparatus.

3. location of lubrication points.

4. preparing baler for lubrication.

5. lubricating baler.

6. cleanup and storing lubricant and equipment.

e. student practice in performing the steps in lubrication.

f. supervised study to clear up remaining questions and concerns from 4-c above such as: 1. How does the lubricant de-

crease wear?

- 2. How does the cost of lubricant compare to the cost of wear?
- 3. How do lubricants differ?

If this is an acceptable model of the process for using the results of competency studies in teaching, then some inferences can be made.

- 1. The competency can be stated as the ability to perform a task.
- 2. The method of performing the task supported by current good practice and technical research should be taught.
- 3. The respondents (industry personnel) to the survey used in the study are most qualified to identify the tasks performed in industry.
- 4. The teacher (all education personnel) must constantly seek out good practice and technical research in order to teach up-to-date subject

5. Education personnel are responsible for developing teaching objectives that will result in the students learning to perform tasks identified by industry personnel through competency studies.

¹Lloyd J. Phipps, Handbook on Agricultural Education in Public Schools (Danville, Illinois: The Interstate Printers and Publish-

ers, Inc. 1966), p. 376.

²Glenn Z. Stevens, Agricultural Education Magazine, "Studies in Progress in Agricultural Education," September 1964, p. 73. ³R. J. Agan, Agricultural Education Mag-"Kansas Studies Agriculture Non-

r'arm Occupations," July 1964, p. 15. 4E. J. Mabon and Clarence E. Bundy, Agricultural Education Magazine, "Competencies Needed in Coun'ry Elevator Grain Marketing," January 1965, p. 171.

5vvilliam H. Hamilton and Clarence E. Bundy, Agricultural Education Magazine, 'Agricultural Competencies in Retail Feed Business," January 1965, p. 175.

6George E. Yetman, Agricultural Education Magazine, "What Employers In Ornamental Horticulture Want," March p. 224.

7Harold Binkley, Agricultural Educ Magazine, "Competencies Needed In cultural Supply Business," August 191

house Grower," April 1967, p. 236.

9David F. Shontz, Agricultural Education Magazine, "Studies Completed in 1966s. March 1968, pp. 206-207.

10Raymond M. Clark and O. Da

Meaders, Agricultural Education Magaz 'The Function Approach For Iden Curriculum Content Part II" . 284, citing James Albracht For Determining Vocational Competer For The Performance of Essential Acid For The Sales Function By Sales Person In The Feed Industry, and the Lac Which The Competencies Could Be Taue (unpublishes PhD dissertation, Mich. State University, 1966).

11 Webster's Third New International B

tionary, G & C Merriam Co., p. 465. 12 Alfred H. Krebs, For More Effect Teaching, (Danville, Illinois: The Instate Printers and Publishers, Inc. 196

TEACHING IN A MULTIPLE TEACHER DEPARTMENT



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With the increased consolidation of school districts in rural areas, the number of multiple teacher departments has also grown. This is bringing together for the first time men who were trained and experienced in single man departments. Many of these men could foresee a chance to increase the breadth and depth of the Vocational Agriculture program. However, the question which immediately presents itself is how the program responsibilities should be divided? Compromises have to be made in such areas as goals for the department, student-teacher contact, FFA activities, rules for the shop and class-

duties such as report forms, and department publicity. A division of responsibilities in these areas should be made taking each teacher's experience, knowledge, and available time into consideration.

Keeping these generalities in mind, the next step is to establish an order to follow in working out an extensive and productive program that will meet the needs of the students and the community. A suggested order of these steps are offered below.

Expressed interest and abilities: Each person involved should know the interest, experience and ability of the room, teacher load, adult classes, farm others. This helps in future planning and placement visits, administrative and provides a smoother functioning

department. For example, a teach specialized in Horticulture would preably not want responsibility for teach Agricultural Mechanics.

Set common goals: Common goals are very important. It is easier to pe as a team if each knows what attal ments are to be sought. Philosophic goals are necessary, but concrete & ectives need to be set too. For example thirty-five enrolled in Adult Fam Management, four State Farmers, 20 fifteen tractors painted or repaired agricultural mechanics.

Student - teacher contact: Class should be set up so a cross-section the students will come in contact 10

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1 teacher. This promotes a greater preciation of student strengths and salarssed by each teacher and the sent feels a stronger personal interest member of the team.

thap and classroom rules: Just as in a family, students will play teacher against the other in an compt to gain special privileges. For one teacher may permit sembiles in the shop while the other die it. Also, one teacher may resent interruptions while another Les pot care. Therefore, it is very imgrant that a set of shop and classroom are made and adhered to, yet be shie enough for a variety of learning eperiences and teaching methods to 🌬 wed.

FFA activities: In dividing the FFA seconsibilities it is important that they divided as to student involvement and time required. If they are divided with each teacher having an equal muber of activities, the resulting wither load may be unbalanced. If possible, the responsibilities should be Intributed throughout the year, rather than concentrated in a given period. it is ding the FFA responsibilities keeps esh teacher knowledgeable about curgent FFA affairs and promotes stronger www.teacher relationships among a water number of the total department errollment.

Student visitation: Each teacher would follow up the students in his lass. In addition, he should attempt so visit the remaining students as time rmits and interest or requests dictate.

Adult aducation: The adult class load find be balanced if possible. Adult may be organized and consixted in a number of ways, however, sch teacher should have as much boundvement as possible. In some desattments one person may be responsilor only adult education, but most spartments will offer two or three *quences with each teacher being in harge of at least one series.

salanced load: After completing the seven steps, check the total load sach teacher. The more closely deautment responsibility and total teachlead becomes equal for each teachthe more harmony, enthusiasm and effort are realized. One method o first determine the number of prep-

arations per week for each teacher. A strong department must have organized, enthusiastic and well prepared instruction. Secondly, determine the number of preps and amount of work involved in the adult education program. Many departments slight the adult education portion of their total program, but tremendous rewards and support are lost if the community adults are not kept interested and informed. Third, take a copy of last year's FFA Program of Work and list all the activities. Try to estimate the amount of time involved in each activity and the time of year the event occurs. Fourth, determine who is responsible or divide the task of filling out report forms, compiling statistics on graduates, and producing department public relations material. Finally, remember that just because a list is made it does not mean that one teacher should not help another.

Communication, Cooperation and Organization: In many ways, a multiple teacher department is similar to a marriage. Cooperation, communication and organization are of prime importance. Each teacher needs to accept his share of responsibilities, perform his tasks to the best of his ability, and yet not interfere with a co-teacher in his performance or hinder the team in attaining the department's goals. Suggest instead of criticize. Give instead of take. Share instead of being selfish. Say "We" instead of "I". Say "Ours" instead of "Mine". Many times one teacher will have to cover for an activity that is the responsibility of another. This sharing and working together builds a stronger department. The important thing is to have someone responsible for seeing that each specific task is accomplished.

One of the best methods we have found for long term organization is to follow the above list of items. For short term, day to day organization, we meet each morning before school starts and discuss the past day's events, the current day's activities, and the following day's schedule. One other item, and perhaps the most important, is to meet Friday after the high school day ends. At this time we prepare a list of all department and FFA activities for the coming week, the person who is responsible, be it a teacher or trying to achieve an equal load is an FFA member, and a summary of the past weeks events and the people

involved. We each take our turn at typing a mimeographed copy and running off enough sheets for administration, teachers, and student distribution. This idea has returned benefits in three ways. First, it is an effective organization tool, Second, we communicate, not only with each other, but to the administration and students. Third, at the end of each year we have a neat, concise record of the department and FFA activities for use in planning the next year's program, making a new Program of Work, and filling out application forms and records.

Each of us has had teaching experience in another multiple teacher department, and each has worked with two other Vocational Agriculture teachers. We have found that one cannot emphasize enough the importance of communication, cooperation and organization. Even then, it will be six months before you are pulling together as a team and not as individuals. We have not found our work load lessened. but our program has become stronger due to better planning and prepara-

An FFA First

Miss Virginia Nicholson, an administrative assistant in the U.S. Office of Education, has become the first woman to receive the Honorary American Farmer Degree by the Future Farmers of America.

The award, which was presented during the 44th National FFA Convention in Kansas City, is given annually to those persons who have given outstanding service to the FFA.

Miss Nicholson has served for 25 years as assistant administrator of FFA's national program in agribusiness.

In awarding the honorary degree to Miss Nicholson, the FAA noted that her coordination of the handling of materials to States relating to farming and agribusiness education has substantially helped improve instructional programs in this industry and that she has played a key role in developing the record keeping of the FFA Foundation.

Miss Nicholson also has served for many years as a secretary to the FFA Board of Directors and the Foundation's Board of Trustees.

GUIDELINES FOR ORGANIZING AND OPERATING MULTIPLE TEACHER DEPARTMENTS



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Dr. Willard H. Wolf Department of Agricultural Education The Ohio State University Columbus, Ohio



In the five-year period from 1963 to 1968, there was a 45 per cent increase in the number of multiple teacher departments of vocational agriculture in the United States, increasing ments. The implementation of sound from 952 in 1963 to 1383 in 1968. State supervisors of agricultural education have projected a similar expansion in the five-year period from 1968 to 1973, with almost 2000 multiple teacher departments expected to be in agriculture in multiple teacher departoperation by that date. Thus, in the ments. ten-year period from 1963 to 1973, the number of multiple teacher departments is expected to more than double.

The trend is not only toward increased numbers of multiple teacher departments, but also toward departments staffed by greater numbers of teachers. State supervisors of agrimultiple teacher departments from 1968 to 1973 will occur among departments with four teachers and departments with five or more teachers. The number of departments with four teachers is expected to more than triple while the number of departments with five or more teachers is expected to about 70 per cent, and departments to the importance of each guideline: with two teachers by 28 per cent.

This trend toward larger and increased numbers of multiple teacher departments will likely continue for some years, spurred by a continued emphasis on school district reorganization into larger administrative units, the continued improvement and expansion of existing programs of vocational agriculture, and the development of new programs. An important contribution to the development of future

multiple teacher departments, and the the individual items or combined item improvement of existing programs, would be a set of guidelines for organizing and operating such departguidelines should result in improved efficiency and effectiveness of departmental operations, with the end result being better quality programs of greater benefit to students of vocational

With the above considerations in mind, a study was conducted in which state supervisors of agricultural education in the United States were requested to identify vocational agriculture teachers in multiple teacher departments and school administrators from their respective states to participate in cultural education have also predicted the study. The selection process resulted that the greatest percentage increase in in 156 teachers and 156 administrators, representing 49 states.

The teachers and administrators were asked to rate the importance of a list of guidelines developed by a review of research and literature. A reviewing committee assisted in modifying and refining the list prior to its submission to the sample. The following five-point quadruple. Departments with three scale was used to secure the opinions teachers are expected to increase by of the teachers and administrators as

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

A total of 279 instruments were returned, representing 89.4 per cent of the 312 which were mailed. Returns were received from 143 or 91.7 per cent of the teachers, and 136 or 87.2 per cent of the administrators.

The following guidelines comprise

that were rated 3.00 or higher by be groups, indicating considerable or treme importance on the scale

Organizing Multiple Teacher Departments

- 1. One person in the multiple teach department should be designated the departmental chairman,
- 2. The departmental chairman should be selected by the school admin strators after consultation with it teachers of vocational agriculture the department.
- Selection of the departmental chair man should be based upon specifi criteria, and should include the fe lowing:
- a. understanding of the vocation agriculture program and its a lationship with the total school program.
- b. respect of fellow teachers, the administrators, students a people in the community.
- c. organizational ability. d. communication ability.
- e. leadership ability.
- f. personality.
- The departmental chairman should be responsible for coordinating the total vocational agriculture program serve as liaison between the teacher of vocational agriculture in the de partment and the school admin strators, and give leadership to the departmental program.
- 5. Adequate time should be provided in the schedule of the departments chairman to enable him to coons nate and administer the affairs a the department effectively.
- For his added administrative respons

wife, the departmental chairman signed be duly recognized by the damistrators, and should be proided an appropriate salary com-

Regular departmental staff meetings sculd be held for the purpose of iscussing, planning, and evaluating the operation of the local program.

Delegating Areas of Responsibility

- Each teacher should be assigned the sponsibility for the general cocontinuation of major components of the program, such as the FFA, the farmer program, and the reaching of high school classes or courses.
- 2 Teacher assignment to areas of the program should be based on a careful consideration of the requirements of the job and the individual aptitudes, interests, experiences, and abilities of the staff members.
- The assignment of teachers to areas of the program should be determinrd by the departmental chairman in consultation with the teachers.
- 4 Teacher assignments should be approved by the school administrators. Discretion should be employed in determining how many and which teachers should do such things as attend FFA conventions, accompany judging teams to contests, and take students with exhibits to fairs.

Developing the Departmental Program of Vocational Agriculture

- I. A detailed program of vocational agriculture for the immediate future and a long-range program should be prepared jointly by all teachers in the department.
- 2 The teachers should seek the advice and consultation of the advisory committee in developing the pro-
- ³ Each teacher should be responsible for planning the program for his particular area(s), using the resources of the staff in planning as
- 4. Each teacher should present his program to the other teachers in departmental staff meetings, enlist other staff members to assist him in implementing parts of his program, when appropriate, by utilizing their special interests and abilities, and

strive for an equitable division of responsibilities among the teachers.

The departmental program should be approved by the school administrators.

Budgeting, Inventorying, and Requisitioning

- 1. Fiscal budgets should be prepared jointly by staff members.
- 2. The departmental chairman should be responsible for presenting the budget to the school administrators.
- Requisitions for expendable items and capital equipment by staff members should be approved by the departmental chairman before they are submitted to the administrators.
- 4. The departmental chairman should assign specific inventorying tasks to staff members, and then collect and arrange the inventories into proper order for submission to the administrators.
- The maintenance of an inventory file should be the responsibility of the departmental chairman.

Responsibility for Records and Reports

- 1. The departmental chairman should coordinate the reporting activities of the department.
- Specific organization reports, such as those pertaining to the FFA and YFA, should be prepared by the members of the staff who are responsible for coordinating the separate phases of the program.
- 3. The departmental chairman should check completed reports and secure administrative approval if necessary before submitting them.
- The departmental chairman should maintain a file of departmental re-
- 5. A cumulative record of students should be kept in a central file available to all teachers.

General School Duties of Teachers

The school administrators, departmental chairman, and staff members should agree upon the general school duties and responsibilities of the vocational agriculture staff.

Public Relations Activities

The departmental public relations program should be a joint effort of all staff members, with one mem-

- ber designated to coordinate the program,
- There should be an equitable distribution and appropriate recognition of activities and events involving all teachers in the department.
- 3. The teachers of vocational agriculture should jointly determine those agencies in the community with whom persons in the department should cooperate.
- The division of responsibility toward agencies in the community should be decided cooperatively among the teachers in the department.

Teaching High School Students

- The teaching of high school students of vocational agriculture should be assigned to staff members in accordance with the local program of instruction being followed, whether by class, course, module, or area.
- 2. The curricular assignments should be determined by teacher competence, teacher interest, teacher experience, and teacher ability with various age groups.
- 3. An agreeable policy should be arrived at and followed consistently by all teachers pertaining to standards, methods, and techniques of grading and discipline.
- Teachers should have teaching assignments so that a student pursuing a four-year program of vocational agriculture would have the opportunity to take courses with two or more instructors.
- There should be provisions for substitute teachers in cases where staff members of necessity are away from the school.

On-Farm and On-the-Job Supervision of Students

- Each teacher should supervise the occupational experience programs primarily of those students whom he teaches.
- 2. The methods for keeping occupational experience records should be uniform throughout the department.
- A departmental file should be maintained on each student's occupational experience program including scope of program and teacher visitation records, indicating dates, visits, problems discussed, and other pertinent information.
- On-farm and/or on-the-job instruction and supervision of adult farmers, young farmers, and adults

in off-farm instructional programs should be the responsibility of the instructor in charge of the class.

Developing Departmental Policy and Coordinating the Use of Facilities and Equipment

- 1. The development of a written statement of departmental policy should be a joint effort involving all teachers in the department and the local school administrators.
- 2. Written statements of departmental policy should be made available to all teachers in the department and the school administrators.
- 3. There should be a continuous interpretation of departmental policy through periodic study in staff meetings. Provision should be made for review and revision of policy at periodic intervals.
- 4. The departmental chairman should assume responsibility for coordinating the use, care, and maintenance of facilities and equipment in accordance with established policy.

Selecting an Additional or Replacement Teacher

- 1. The departmental chairman, in consultation with other teachers in the department, should be responsible for recommending to the school administrators that a department should add an additional teacher.
- 2. The selection of an additional or replacement teacher should complement the abilities and interests of those teachers presently employed in the department.
- 3. Teachers should be selected who can work in harmony with the other staff members.
- 4. The departmental chairman and his staff should recommend one person to the school administrators, who in turn make the final decision and recommend one person to the board of education for employment.

Program Evaluation

1. A periodic evaluation of all aspects of the program should be a combined effort of all staff members.

TODAY'S REALITIES . . .

TOMORROW'S FUTURE

Dan Theno Agriculture Instructor Oregon High School Oregon, Wisconsin

Changes must occur in the curriculum in vocational agriculture to meet the occupational realities of today. This means converting our programs in "production agriculture" to "agribusiness" and there is a difference. The term production agriculture" connotes learning activities stressing the basic, practical skills and abilities necessary in farm operation. "Agribusiness", on the other hand, refers to the scientific and technical aspects of agriculture with emphasis on the non-farm agricultural occupations where most of our students will be heading. Curriculum is one area where not only we as individual teachers, but also our professional agricultural associations, have been lax. It's time to make a concerted effort to modernize our curriculums so that we may attract more career-oriented students and give them the type of training they want and need.

We need to improve our public relations and in doing so we might accomplish several goals. We will improve our image with the general public; we can build enthusiasm in our students and give them a feeling of importance and belonging; we can encourage increased enrollment, provided our programs are changed to meet the occupational realities of today; we can lend credibility to agricultural education in our legislative halls; and having accomplished the first four, we can expect feedback which will encourage and reward our efforts as teachers.

What would you think if the Press. dent of the United States had the official title of "Head of Waste Disposal?" Or if your local high school was named "Joint Prison No. 1?" Now what do you think of a national organ. ization that purports to be for all year. tional agriculture students calling itself "Future Farmers of America?"

Without knowledge of the program. the name to the outsider describes what the organization is. When, according to Central Region FFA Vice-President Wayne Humphreys, less than three out of ten Future Farmers are actually future farmers, are we really describing ourself accurately? Instead of wasting time and resources trying to explain to school boards, students and parents that we're something different than what we call ourselves, let's call our selves what we are. It's time to give the FFA a broadly-based name that will include the farm student and the future farm operators along with the majority of our students who will be entering agribusiness occupations Changing our label is not a cure-all but it is a cure for part of our identity problem.

The mass media is one of the most effective means of conveying a message to people. Let's use it. Most of probably have some program of pub licity in our local newspapers, but news papers, have only limited success. How many of you read the women's section or the business page if you are not

directly concerned with the topic? Get

What is needed is a combined effort by the FFA and our professional asciations in using other forms of mass media, such as radio and TV, to bring the message of vocational agriculture to the people. FCC regulations require radio and TV companies to reserve port of their announcement time for public service messages. The only cost neurred by the user is the initial cost of making the announcement. Let's go to the people.

The FFA has been a proud, wellorganized group from its inception, but some of its programs and structure must be modified to promise a future as bright as its past accomplishments. Like curriculum, the FFA must be tailored to fit the needs and expectations of today's agriculture student. There are several areas where change should occur in the FFA: (1) the name should be broadened; (2) the words "I believe in the future of farming . . ." in the Creed does little to spur the thoughts and hearts of agribusiness-directed members; (3) while our award system is changing, more must be offered as incentives to non-farm students; (4) our FFA degree system needs better identification; and (5) projects should be accepted and encouraged in areas of student occupational interests.

The changes we must bring about in agricultural education are not easy. Building a curriculum or organizing publicity, or restructuring the FFA will take work and dedication. But they must come. The contemporary youth of today need learning experiences that are real, that are interesting and that satisfy the personal goals of their lives. Will we, as professional agriculture instructors, have the will, the courage, and the foresight to cause changes instead of responding to them? Let's start the dialog, the thinking and the organization that the important

thing, not the destruction of something. It must have purpose, direction and timing. Change can be evolutionary or revolutionary, voluntary or involuntary, guided or mis-guided. But, regardless of its form, change does and will occur in agricultural education as it will in anything else.

In order to set a bearing on the direction, purpose and timing of changes that should occur in agricultural education, let's look at the present. From my viewpoint the picture in agricultural education looks bleak. The 1968 Amendments have generalized vocational education and our insurance on funding has been liquidated. Our national leadership in the Office of Education has been reduced. The Future Farmers of America is suffering from a membership lag and doesn't address itself to the needs of non-farm agricultural students. The public has a stereotyped version of a modern day agriculturist fresh from the screen of "Hee Haw" and "Green Acres". Many vocational agriculture departments are relying on outdated curriculums and are lax in providing career guidance in meeting the occupational objectives of today's youth. Enrollment in vocational agriculture is suffering and we are losing agriculture departments in areas that could supply many fine agribusiness leaders for the future. These are but a few of our problems and you could add to the list. The question remains, however, are we willing to respond to these problems through intelligent dialog and investigating? Let me address myself to three areas where I believe our problems are most localized: curriculum, image and FFA

How many of you would recommend to your students to raise lard-type hogs when meat-type hogs are what the consumers are asking for? Assuming that the point has been made, how, then, can many of us justify a straight production agriculture curriculum when the energetic, restless youth of today (our consumers) are asking changes will take. Let's bring about for contemporary learning activities? changes in agricultural education now Statistics show that approximately 40% that will secure its future in the years of the American work force is engaged in agribusiness while only 5% is engaged in the operation of a farm "Change" may be defined as "de- enterprise. One of the old philosophies parting from traditional norms, value of education is to teach "where the systems and habits." Change must have student is at". My philosophy is to as its goal, the improvement of some- teach "where the student is going".

What Others Are Doing

Occasionally items come across the editors desk that spark an idea. In the pictures below are two such items a program of recognition for outstanding teaching and outstanding Doctoral study. Both awards were made recently at the National Meeting of the American Agricultural Economics Association held at the University of Southern Illinois, Carbondale, Illinois.



Michael D. Boehlje, right, Oklahoma State University Assistant Professor of Agricultural Economics, receives the American Agricultural Economics Association Doctoral Thesis Award for his Ph.D. dissertation at Purdue University. Making the presentation is Professor Willard Williams of Texas Technological University, Lubbock, Boehlje, a native of lowa, is a 1965 graduate of Iowa State University.



Oklahoma State University agricultural economist John W. Goodwin, right, was awarded the American Agricultural Economics Association's Distinguished Undergraduate Teacher Award for 1971 from Professor John Malone of the University of Nevada. Goodwin, a native Oklahoman and graduate of the Panhandle A and M College in 1956, was selected from university teachers with less than ten years of

Training Students for Unknown Working Conditions

Johnny M. Johnson Assistant Professor Tarleton State College Stephenville, Texas



On the job training and work experience programs are becoming widely accepted by vocational educators. Numerous studies have been conducted on manpower requirements for certain occupations.

Many training programs have been initiated on the basis of these manpower studies which showed that a certain number of workers are needed in a certain occupation. It does not seem possible that so many programs have been founded upon this criterion alone. Why is this true? Certainly, programs should be based upon needs of students and not employer needs alone. What then needs to be done? Educators need to learn more about the working conditions on the job for which they are training students.

We have dealt too long with skills needed by workers and number of job openings. These pursuits need to continue, but only after it is certain that the jobs for which students are being trained will provide a level of living acceptable to the students. In far too many cases, teachers are preparing youth for job placement without any knowledge of wages, hours, physical requirements, and other working conditions. Are young persons being prepared for entrance into occupations which will provide their needs?

It is realized that an air of criticism has prevailed in the opening paragraphs of this article. This was intended. If educators are not willing to evaluate their own program foundations and to criticize and to change them, then surely trouble is just around the corner.

Let us take a positive look at what needs to be and what can be done. A logical order to developing training programs would be:

- 1. Identify those occupations which need more employees.
- 2. Identify the working conditions that exist in these occupations.
- 3. Determine the needs of students in reference to their acceptable standard of living.
- 4. Determine the skills and knowledge needed for employment in the chosen occupations.
- 5. Combine the information to produce a student adequately trained for an occupation which will be satisfying to him in terms of individual values and beliefs.

Many of the above steps have been taken by educators. Manpower requirements have been studied, essential skills have been identified, and students needs have been analyzed. The missing link is that of understanding the occupations. This must be done if students are to make realistic job choices. It is recognized that a few studies have been conducted in the area of working conditions, but this should become the priority research topic if job preparation programs are to survive.

One approach to studying working conditions was made last year by the author. The title of the research project was "Requirements and Opportunities for Entry Workers in the Occupations of Producing and Marketing Ornamental Nursery and Greenhouse Specialities." The purpose of the study was two-fold. Knowledges and skills needed were identified and working conditions were studied.

The study was limited to growers of general line-out nursery stock. In the nursery business, a grower is one who produces 50 percent or more of the stock he sells. The sample for the study consisted of 30 out of 224 general-line growers in Texas. The sample was drawn from the five areas of Texas which had the greatest concentration of nurseries. Naturally, this included

many of the areas surrounding larger cities. A personal interview made with the owner or operator each of the nurseries. Analyses variance and t-tests were used to den mine if differences existed between certain working conditions in various locations or between busin of different sizes. The following are few of the conclusions concerning w requirements in the job area studie

- 1. The most commonly found i classifications in the industry are a. Manager
 - b. Common laborer
 - c. General worker
 - d. Greenhouse worker
- e. Field worker f. Plant propagator
- g. Ball and burlapper h. Landscape foreman
- 2. Willingness to work and learn more important in obtaining is than is a high school diploma
- 3. In the summer of 1968 entry leve workers were paid an average hourly wage of \$1.50 with a range of \$1.40 to \$2.00.
- 4. Vacation and sick leave days were negotiable between employers employees. No established po seems to exist within the industr
- 5. Large businesses, in general, p higher wages to beginning w ers than do small businesses.
- 6. Nurseries near the large metric politan areas pay higher beginning wages than do the nurseries in the small metropolitan areas.
- 7. Length of work week varies nificantly among businesses in five geographic locations with average of 44 hours per w Nurseries near the large metr politan areas require workers work more hours per week the do nurseries in the small metro politan areas.
- 8. Length of work week does vary significantly between sizes businesses.

4 All beginning horticultural workers are expected to enter employment at the fieldman, greenhouse worker, or general worker level. Persons choosing horticulture as an occupation field must be prepared to work long hours at low wages for a considerable length of time before they can hope to obtain managerial positions.

dent that working conditions were as important, if not more so, than technical knowledge and skills

being studied. Emphasis should be placed on the identification of working conditions. Perhaps many have declined to do so because of a fear that businessmen would be hesitant to talk freely on the subject. In conducting this study, the researcher found that nurserymen were very helpful and understanding. They were very interested in contributing to the development of training as the study progressed it became programs. They were very interested in contributing to the development of training programs. They were very interested in acquiring employees who

STATEMENT OF OWNERSHIP, MANAGEMENT AND CIRCULATION (Act of August 12, 1970: Section 3683, Title 39, United States Code)

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PS Form 3526 July 1971

know the working conditions involved in the nursery business. This would provide them with a labor force which would probably be happier and more productive in their particular businesses. With this type of attitude prevailing among businessmen, it seems that vocational educators should move rapidly into the field of identifying working conditions before placing students. If this is done, one can then say that students are entering into occupations which they have chosen based upon their individual values.

SEE INSTRUCTIONS

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News to Me

The world's food and agricultural contems still are far from being solved. aithough there have been modest ingraves of about 3 per cent in world supput of agricultural products in dereloging countries the last three years, the average per capita production in the countries remained about the sme throughout the last decade. Reevery from drouths and wider use of www. high yielding wheat and rice sarieties in the Far East were plus

Oris Wells, F.A.O.

"We give up little economic growth in preserving rare amenities. The failwe to harvest the timber or mineral sources of the Boundary Waters Canoe Area or the High Sierras, or to develop the potential power recourses d unique natural features, such as Gand Canyon or Hell's Canyon, will have no measurable impact on the nawal economic growth."

Vernon Ruttan, University of Minnesota

Institutions are expressions of seeking to achieve by olective action what men cannot there as well by individual action. Thus conceived, institutions encompass cultural values and goals of the eiety, impose these values and goals a individual behavior and in turn infactorize the very content of the values goals held by society."

M. M. Kelso and J. S. Hillman

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*CEMBER, 1971



Dennis Dazey, (right), State President of the Illinois FFA, President Nixon, Governor Ogilvie of Illinois and the beautiful queen of county fau watch while an exhibitor shows his holstein cow at the Illinois State fair. (Photo by the Chicago Tribune)



Clemeal Harry, Vocational Agriculture Teacher at Folsom Jr. High School in St. Tammany Parish, Louisiana explains to his administrators, Principal Alfred Greenwood, (center), and Assistant Principal Earl Warren, (left), a skill in horticulture being put into practice by some of his students. (Photo from J. C. Simmons, Area Supervisor, Franklinton, Louisiana)

STORY IN PIGTURES

by Robert Walker,
University of Illinois



Mel Warner briefs Ron Lindeman of Sleepy Eye and John McCra of Springfield, vocational agriculture teachers, who spent 31/2 studying the Grain Terminal Association as part of a graduate of in agricultural education at the University of Minnesota. (photo Farmers Union Grain Terminal Association)