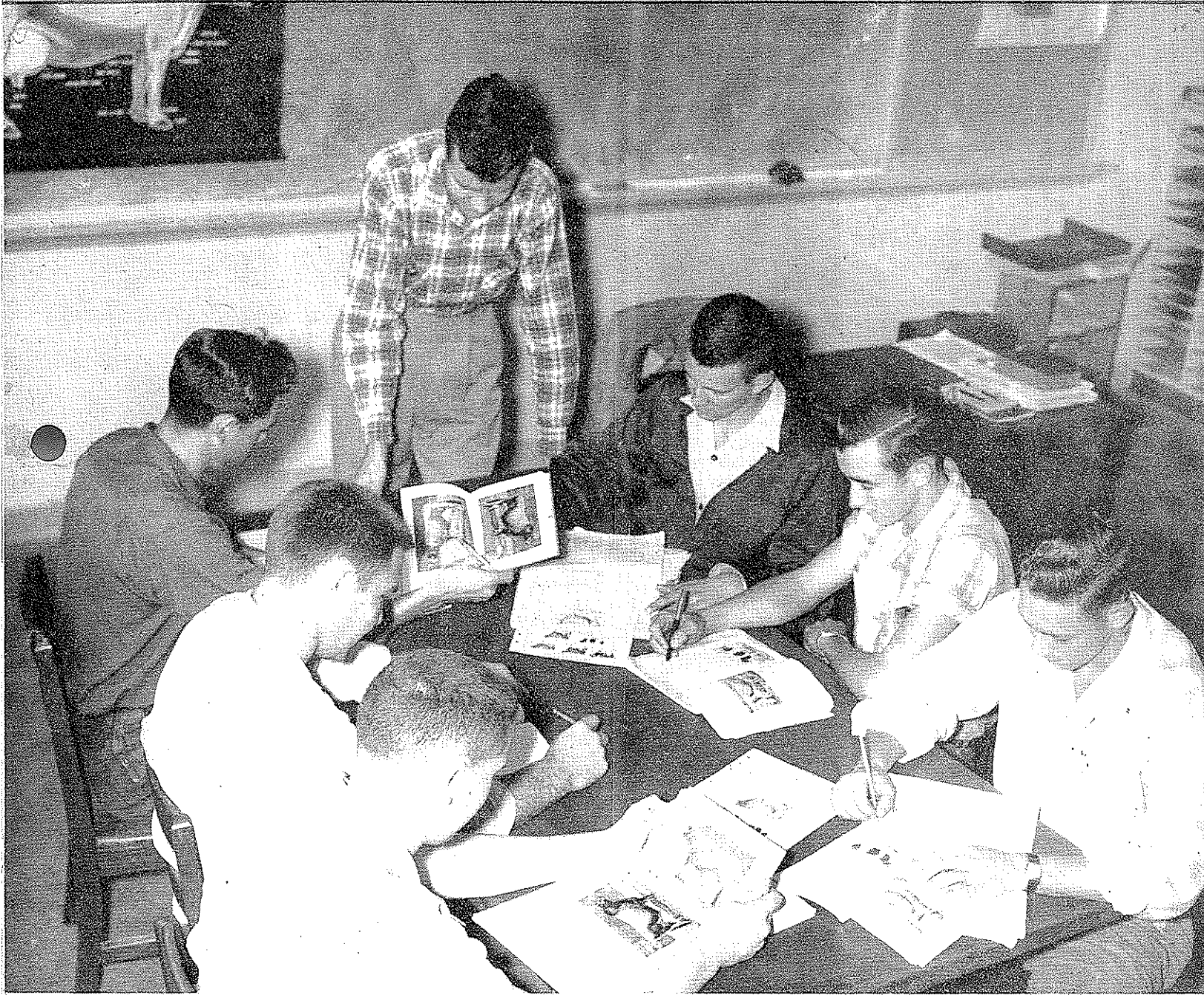


The **AGRICULTURAL EDUCATION** *Magazine*

VOLUME 27

APRIL, 1955

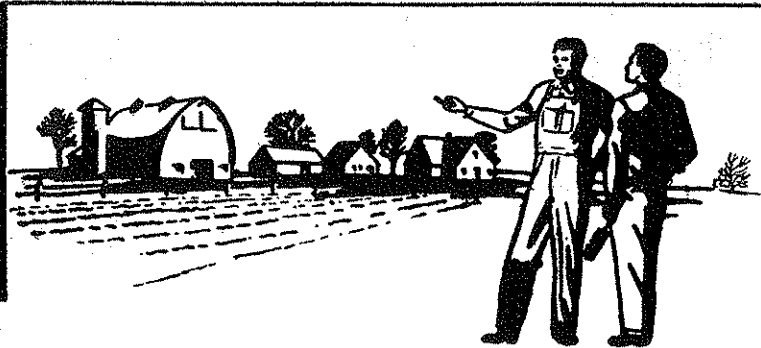
NUMBER 10



Picture legend, page 239

Featuring— Teaching as a Profession

The Agricultural Education Magazine



A monthly magazine for teachers of agriculture. Managed by an editorial board chosen by the Agricultural Section of the American Vocational Association and published at cost by Interstate Printers and Publishers, Danville, Illinois.

THE INTERSTATE  DANVILLE, ILL.

MANAGING EDITORS

W. A. Smith, Cornell University, Ithaca, New York,
Editor
W. Howard Martin, University of Connecticut, Storrs, Connecticut
Consulting Editor
Byron J. McMahon, Bureau of Agricultural Education, 721 Capitol
Ave., Sacramento, California
Business Manager

SPECIAL EDITORS

CENTRAL

J. N. Weiss, University of Illinois, Urbana, Illinois
H. P. Sweany, Michigan State College, East Lansing, Michigan

NORTH ATLANTIC

H. R. Cushman, University of Vermont, Burlington, Vermont
S. D. McMillan, Dept. of Education, Charleston, West Virginia

PACIFIC

S. S. Richardson, Utah State College, Logan, Utah
L. L. Knuti, Montana State College, Bozeman, Montana

SOUTHERN

R. H. Tolbert, University of Georgia, Athens, Georgia
O. L. Snowden, Mississippi State College, State College, Miss.
Henry Ross, Texas A. & M. College, College Station, Texas

AT LARGE

Max Lampo, 101 West Grand, Neosho, Missouri
Teachers
A. H. Krebs, University of Illinois
Book Reviews
J. K. Coggin, North Carolina State College, Raleigh, N. Car.
Photography
H. N. Hansucker, U. S. Office of Education, Washington, D. C.
Vocational Division

SPECIAL REPRESENTATIVES

Southern, E. W. Garris, Gainesville, Florida
North Atlantic, Earl H. Little, Concord, New Hampshire
Central, Ernest L. DeAlton, Fargo, North Dakota
Pacific, Jack Ruch, Laramie, Wyoming
N.V.A.T.A., Robert Howey, Sycamore, Illinois

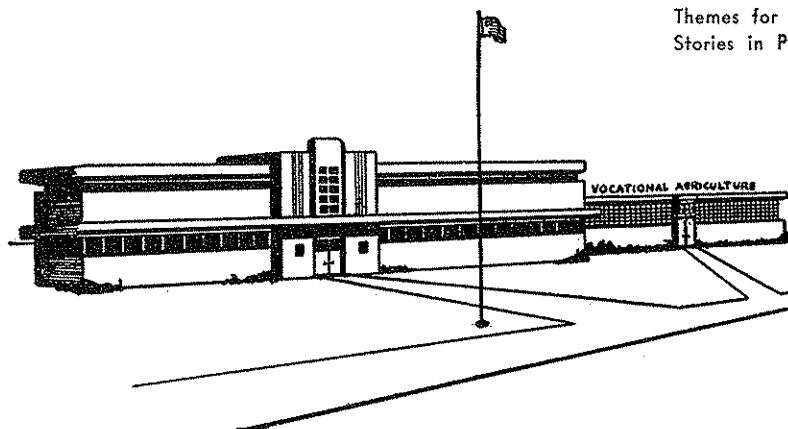
EDITING-MANAGING BOARD

E. W. Garris, Florida; Earl Little, New Hampshire; E. L. DeAlton,
North Dakota; Jack Ruch, Wyoming; Robert A. Wall, Virginia;
W. T. Spanton, Washington, D. C.; M. N. Abrams, Texas; Robert
Howey, Illinois; Byron J. McMahon, California; W. H. Martin,
Connecticut.

Contents

Editorials

| | | |
|--|---|-----|
| Guest Editorial | Dr. W. W. Yapp..... | 219 |
| The Purposes of Vo-Ag | Editorial Correspondence..... | 219 |
| Teacher Shortages | R. E. Moeckel..... | 220 |
| Long Range Planning for Younger Teachers..... | Clarence J. Cunningham..... | 221 |
| A Comparison of Professional Activities Reported by Masters' and Bachelors' Degree Teachers in Georgia..... | Roy J. Yelton | 222 |
| The Role of the Teacher of Vocational Agriculture in General Education | A. L. Winsor..... | 223 |
| A Functional Philosophy of Education..... | Howard W. Deems and Raymond J. Agan..... | 224 |
| Superintendent or Teacher?..... | W. M. Pees and Austin E. Ritchie..... | 225 |
| Should You Be a Teacher of Reading, Too?..... | Orville E. Thompson..... | 226 |
| Make a Good Start..... | A. H. Hummell..... | 227 |
| You Can Write a Professional Article..... | Dale W. Andrews..... | 229 |
| Power Tools Belong..... | James H. Dice..... | 230 |
| Work with Teachers and Pupils of Science..... | Paul F. Spraggs..... | 231 |
| Learning Can Be Fun..... | Paul M. Hodgson..... | 232 |
| What Is My Job?..... | A. B. Cordes..... | 234 |
| Students Decide Their Own Grade..... | Roy L. Osella..... | 234 |
| Ohio "Co-op" Leaders and Vo-Ag Teachers Plan for Local Activities | Walter L. Bluck..... | 235 |
| Is Your Job Getting You Down?..... | Kenneth J. Liggett..... | 235 |
| Technical Skills Needed..... | Wallace H. Elliott..... | 237 |
| News and Views of the Profession..... | Paul Johnson..... | 238 |
| The Farm Mechanics Program for Today..... | Paul Johnson..... | 238 |
| Montana FFA Backs Safety Drive..... | | 238 |
| Book Reviews | | 239 |
| Themes for Volume 28..... | | 239 |
| Stories in Pictures..... | | 240 |



Subscription price, \$2.00 per year, payable at the office of the Interstate Printers and Publishers, 19-27 N. Jackson St., Danville, Illinois. Foreign subscriptions, \$2.25. Single copies, 20 cents. In submitting subscriptions, designate by appropriate symbols new subscribers, renewals and changes in address. Contributions should be sent to the Special Editors or to the Editor. No advertising is accepted. Entered as second-class matter under Act of Congress, March 3, 1879, at the post office in Danville, Illinois.

Editorials

Guest Editorial

DR. W. W. YAPP, Prof. of Dairy Breeding, University of Illinois

Currently, 12 per cent of the people in this nation produce the food and fiber for our 163 million people. Forty years ago it required one-half the people living on the land to perform the same service. If these facts teach us anything at all, it is that a farmer of today must be more effective in getting production from the soil and a yield from his animals than was his father. Furthermore, the present day farmer occupies a more important place in agricultural production and more people are dependent upon the products from his farm than was true of the farmer of 25 years ago.

It is due largely to the application of knowledge which has come about as a product of agricultural research that today's farmers are more efficient. They have, for this reason, a better understanding of the nutritional requirements of animals and plants, they have learned how to make a more extensive use of power, and they can also fashion new higher yielding strains of both animals and plants. The discovery of such new concepts as hybrid corn, artificial insemination, antibiotics, etc., all products of research, have helped make farming what it is today.

In this process of development the farmer has found it necessary to keep himself in pace with the progress of his industry. He has had to learn how to educate himself so that he could make use of many of these new discoveries and new inventions. Even more important still to him is that he has learned that it is necessary to face his problems with an open mind. He soon discovered that he succeeded best when he recognized and used these new tools for agricultural progress.

Formal education has helped to provide a bridge by which the beginning farmer can approach his new and more technical and complicated problems. Vocational agriculture as taught in high school has helped in this by providing an opportunity for the agriculturally minded youth to equip himself to understand the contributions of agricultural research and oftentimes, perhaps, even to better apply them. His vocational agricultural training has exposed him to facts and thus has aided him in making more intelligent decisions. In this fashion it has improved his opportunity to succeed in a highly competitive society.

Such a vocational training should never be presumed to take the place of basic knowledge. The ability to speak and write correctly, to solve practical problems involving mathematics, and the ability to live comfortably with people is important to the happiness and success of the individual in life's long pull. It is more valuable to him than the formula for a ration, knowledge to build a pig house, or knowing how to treat milk fever, important as that knowledge may be. What I am trying to emphasize is that it requires both basic knowledge and applied knowledge to make a successful and happy farm life.

Farm life provides an ideal place to grow up. It offers an excellent opportunity for clear thinking. It is

(Continued on Page 231)

The purposes of Vo-Ag an editorial controversy.*

November 24, 1954

Mr. Gordon L. Berg, Editor
County Agent and Vo-Ag Teacher
Dear Mr. Berg:

Your editorial contribution for the February issue of our Magazine reached me just before my deadline for copy. I want to thank you for the contribution.

While acknowledging receipt of the editorial and assuring you that it will appear in February, I cannot refrain from expressing disagreement with some of your basic implications. In the first place, I believe you will agree with me that vocational competence is obtained through "learning by doing." If this is granted, how many vocations in agriculture can be prepared for in the rural community where departments of vocational agriculture are found? Farming stands out as the vocation which furnishes such opportunity. I grant that there are other vocations in agriculture for which a preparation in farming is a desirable if not a prerequisite asset, and to such an extent our vocational agriculture departments can prepare for the so-called related occupations but only to such extent. This still leaves preparation for farming as being the purpose of vocational agriculture at the secondary school level. And we must not forget that vocational education embraces more than the secondary school level.

Another point of disagreement is with your implication that only farm boys are eligible for or can participate in vocational agriculture. The Smith-Hughes law does not support this at any point. Any boy who can obtain the opportunities, or for whom the opportunities can be obtained, for experiencing as a means of learning or of solving farm problems can enroll in and profit vocationally from vocational agriculture.

Perhaps our point of difference revolves around the question of how vocational education differs from education which is not vocational in purpose. This distinction seems to be getting rather foggy in some quarters as I read the responses appearing in the September issue of your excellent Magazine.

Sincerely yours,
W. A. SMITH
Editor

Mr. W. A. Smith, Editor
Agricultural Education Magazine
Dear Mr. Smith:

December 1, 1954

It was an honor to receive such a thorough, thought-provoking reply to my editorial, which you say will appear in your February issue. I'm sorry I was forced to delay this letter a couple of days. We just moved our offices and things are in a general state of confusion.

I didn't expect you to agree with my thinking. However, by your own admission, some of our outstanding leaders are changing their attitudes toward what

(Continued on Page 233)

*Editor's Note: Reproduced here is the first of a series of letters prompted by the Guest Editorial in the February issue. Others will appear in subsequent issues. The Magazine invites its readers to use its columns as a forum on this subject or any other on which differing points of view warrant expression.

Teacher shortages

Factors involved and possible directions for correction

R. E. MOECKEL, Vo-Ag Instructor, Onsted, Mich.



R. E. Moeckel

IN our American economic system there are continual adjustments in the supply and demand of any commodity, service or type of personnel.

There are some obvious reasons for the present teacher shortage. One of those reasons is that students preparing to

be teachers during the second world war and the Korean conflict were drafted for military service. Another very evident reason is the increasing enrollments in the public schools.

A discussion of the less obvious reasons for, or factors in the present teacher shortage will be the main purpose of this article. Factual data would be very desirable and make the following remarks much more effective. However, the writer did not have access to such data. For this reason only the points of view familiar to people in teaching are discussed.

A list of the reasons for and factors influencing the present teacher shortage that are to be discussed are as follows:

1. Leaving the profession
2. Allowing substandard people to teach
3. Equalizing teacher requirements
4. Unwillingness to pay for training required
5. Mass production philosophy of our society
6. Housing for the teacher
7. Encouragement of future teachers
8. Warning of teacher action
9. Plan of action

Leaving the Profession

Many teachers change their occupation after adequate teaching experience is gained. From observation it appears that much of this mortality is in the group of more successful teachers. Why is this true? Successful members of the dental, medical or veterinary profession are seldom heard of who have left that work for another occupation. Perhaps such professional groups should be studied to determine why their more successful members do not leave the occupation for which they are trained.

Allowing Substandard Teachers

The practice of state government officials in permitting inadequately trained people to teach can only cause more shortages of qualified teachers. This practice bypasses the main reason for the shortage of qualified teachers which is, in a large part, economic. If school systems cannot hire enough qualified

personnel they are allowed to bring in substandard people. These people have less invested in their preparation and can, therefore, work for a lower salary. These lower salaries discourage the present teachers and future teachers who are investing in adequate preparatory training. Meanwhile, the underlying causes of the original shortage have not been corrected but have been made more acute.

Would parents allow a medical student with one or two years of training to treat their child for physical complications? Is it not equally important to have the person properly trained who works with the minds of young people?

Equalizing Teacher Requirements

The requirements for entrance into the teaching profession seem to be very unequal between states and within states. This is not allowed in some professions and it is detrimental in the teaching profession—for students as well as teachers. This condition has a demoralizing effect on teachers, similar to that described in the previous paragraph.

Unwillingness to Pay for Training

The public school leaders are not willing to pay teachers according to the amount of training they require of them. This stigma is partly due to the present day conditions in which unskilled and semi-skilled workers receive a short period of training with pay and then go into good paying jobs. The public tries to put teachers in this economic classification. However, it should be remembered that the future teacher must invest about \$5,000 to \$10,000 in school expenses and loss of earning power for three to five years in order to be adequately prepared for the teaching profession.

Mass Production Philosophy

The philosophy of our society seems to be that a particular job can be mechanized and turned out by mass production methods. The public, subconsciously, has this attitude toward the training of young minds. However, if this philosophy is followed the result is likely to be disappointing to parents and frustrating to teachers.

Housing for Teachers

Because of the uncertainty of tenure for the teacher, housing is usually a problem. Perhaps more teachers would be encouraged to remain in the work if something could be worked out. Most schools know about how many faculty members they need. Could the school officials make agreements with private owners to reserve housing facilities in the area for the faculty? Another plan might be to have the local school system own adequate housing and charge rent enough to cover maintenance and interest on the investment.

Encouragement of Future Teachers

The present trend of friends of public education to encourage high school graduates to prepare for teaching is not a satisfactory answer. It only over-crowds the teacher training institutions, puts more inexperienced people in the field, and will mean more dissatisfied people who will leave teaching.

Considerably more research and effort must be put forth to keep successful teachers in the profession.

Warning of Teacher Action

If the responsibility for correcting some of the above mentioned problems is not accepted by the leaders of public education, then the teachers themselves may use more stern procedures. This action by teachers may not be far in the future. It would probably be in the form of a more strongly organized professional organization with influence to restrict supply of teachers such as some other professional groups now have. It could also come in the form of organized action such as labor unions now take. In either case, it would be out of the control of the public.

Plan of Action

In conclusion, it might be said that there is very little that the teaching profession can do about the present teacher shortage, except for the last factor discussed.

It is up to the public. They can have the quality and adequate supply of teachers they need. When the public needs better roads they discuss, plan, and then appropriate money to carry out those plans. The same procedure must be followed to correct the shortage of qualified teachers. □

The 'Why I Teach' Contest

The American Legion Auxiliary announces its 1954-55 contest for teachers, entitled, "Why I Teach."

The purpose of the contest is to encourage eligible young men and women to enter the teaching profession.

A contestant must have completed five years of teaching by June 1, 1955. The essays must be of not less than 250, and not more than 300, words.

There will be divisional awards of a \$50 United States savings bond to the contestant having the winning entry in each of the five divisions. A national award of a \$250 United States savings bond will go to the one of the five divisional winning contestants.

Mrs. J. Pat Kelly of Birmingham, Alabama, National Security Chairman of the American Legion Auxiliary, has announced that the date of the contest is from December 1, 1954 to midnight of June 1, 1955.

All entries are to be sent to the national headquarters of the American Legion Auxiliary, 777 North Meridian Street, Indianapolis 7, Indiana. □

Planning can lead to satisfactions in teaching

Long range planning for younger teachers

CLARENCE J. CUNNINGHAM, Vo-Ag Instructor, Raymond, Ohio



C. J. Cunningham

“TO participate in worthy undertakings for the improvement of agriculture” is one of the purposes of the Future Farmers of America. Have you, as advisor, stopped to plan what improvement in agriculture is needed in the community

where you are teaching?

As a younger teacher, I felt that a plan should be available showing to me the needs of the community in the next year, five years, or even ten years.

I feel that a long range plan can assist the younger teacher in several ways.

First, better physical facilities can usually be obtained through planning. It may only be a power saw or the painting of the class room, or it might be for an entirely new department.

I find that since I have developed a long range plan, it is easier to organize programs of instructions and they more nearly meet the needs of the community.

A long range plan is a good public relations item to show the superintendent and others what you plan to strive for in the next few years. It may also be used in future years in evaluation of what you have accomplished.

I have developed a long range plan which includes three major areas, with subdivisions as follows:

A. Earning a living

1. Production of crops
2. Production of livestock
3. Management

B. Living a life

1. Home
2. Community

C. Vocational Agriculture facilities and program

1. Classroom and shop
2. Future Farmers of America
3. Adult farmer course
4. Young farmer course
5. Public relations

This was the general outline I followed in setting up my long range plan. Under each subheading I included the goal I am striving for and some of the practices to guide me in achieving this goal. Some of the items in my subheadings were:

1. Obtain average corn yield of 80 bushels per acre through use of more practical fertilization.
2. Increase production of meadows to three tons per acre through use of bandseeding, fertilization, and including higher percentage of legumes.
3. Extended sanitation program on farms with sheep flocks.
4. Change rotations to include less soybeans and more alfalfa.
5. Provide more recreational activities on home farms and at community center.
6. Construct larger shop door.
7. Rate “gold” in FFA State Chapter Contest.
8. Increase adult enrollment from 27 to 50.
9. Develop better community-vocational agriculture understandings through public relations.



Community leaders are excellent help to the teacher in long range planning. This can come through individual contacts and in groups such as an Advisory Council.

The Plan Calls for Action

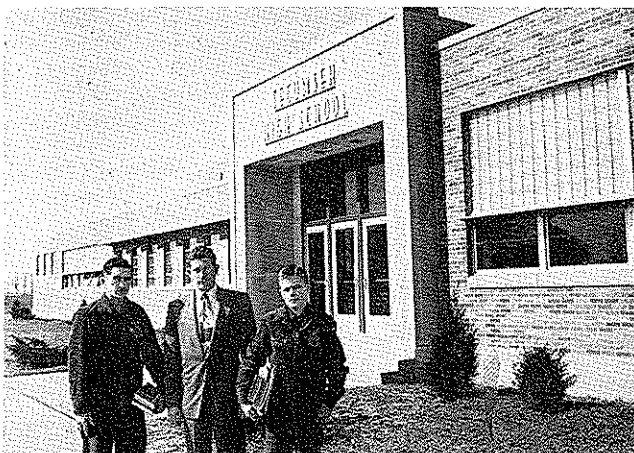
A long range plan is only as good as the teacher makes it and uses it in his work. As a new teacher in a community my ideas alone did not provide me with the best possible plan.

In developing my plan I first became acquainted with the practices that were common in the community. Visitation to many farms in the community will make apparent to the teacher the common practices.

Leaders in the community will help to acquaint a teacher with the needs of the district. In developing my plan I talked to many people individually, but if I had it to do over I would use an advisory committee as many teachers are doing.

A third major factor in getting information for my plan was the studying of agricultural data, such as numbers of livestock and acres of cropland. In one comparison I made, I found that my school district needs approximately forty per cent more pasture days for the present amount of livestock. The county agent and soil planner will be glad to help find this type of information if it is not already available.

Do you know what improvement is needed where you are? If you are not sure, take a little time to plan where you are going and perhaps the road ahead will be much smoother than you expected. □



Facilities such as these may be obtained through planning. The results include satisfaction for the teacher and more interest among pupils.



Knowledge of community practices helps in developing a long range plan. Teacher and pupils are getting first-hand evidence of local conditions.

**Should teachers continue professional training?
Here is some affirmative evidence.**

A comparison of professional activities reported by master's and bachelor's degree teachers in Georgia

ROY J. YELTON, Vo-Ag Instructor, Wrightsville, Georgia



Roy J. Yelton

DURING recent years there seems to have been a growing interest throughout the country on the part of teachers of agriculture in the pursuit of advanced professional training leading toward the Master's degree. This has been true especially in the state of Georgia. During the three-year period 1941-1943 only two teachers of agriculture received the Master's degree whereas during 1950-52 forty-nine such teachers received the Master's degree in agricultural education from the University of Georgia. Much of the discussion concerning the value of a Master's degree to teachers of agriculture has been in terms of beliefs and opinions and there seems to have been little authoritative information with which to substantiate this subjective evaluation.

Upon entering graduate school the author became curious as to the value of a Master's degree to a teacher of agriculture as reflected in the nature and scope of his work. This interest led to the development of a study comparing the activities carried on by teachers of agriculture in the state of Georgia who had a Master's degree with teachers within the same field who did not have such a degree. The study included only full-time teachers of agriculture during the school year 1951-1952. The data for the study were obtained from the official reports filed by the teachers with the State Department of Education.

Groups Were Equated

In order that the two groups of teachers might be as nearly equal as possible, twenty-seven teachers with a Master's degree were equated on the basis of eight factors with twenty-seven teachers who possessed only a Bachelor's degree. Four of these pairing factors relating to the teachers were: (1) years of teaching experience, (2) years in the present community, (3) age, and (4) grades earned while obtaining the Bachelor's degree. The following four pairing factors dealt with the community in which the teachers were located: (1) average size of the farms in the county, (2) average value of land and buildings in the county, (3) prevailing farming type in the county, and (4) size of the school.

The final pairing of the Bachelor's degree teachers to be used in the study

with the Master's degree holders was done by a jury of three qualified but disinterested persons. When tests were applied to the factors for which the two groups were equated, no statistically significant results were obtained. This indicated that the two groups had been paired satisfactorily for the purposes of the study.

Manner of Comparison

When the data concerning the activities of the teachers were thoroughly investigated, it was found that both the Master's and the Bachelor's degree groups conducted all-day, day-unit, special farm shop, young farmer, and adult farmer classes in their instructional programs. The number of teachers reporting young farmer classes was, however, very small for each of the two groups.

The comparison of the paired groups of teachers was accomplished by the determination of "t" scores to ascertain the significant differences, if any, that existed between the activities carried on by the group of teachers who held a Master's degree and by those teachers who possessed only a Bachelor's degree.

The steps involved in the treatment of the data were as follows: (1) calculation of the 'means' per month for the activities carried on by the two groups of teachers, which may have been reported in number of persons enrolled in classes, number of hours of work, or number of meetings; (2) determination of the standard deviation of the 'means' for both groups of teachers; (3) computation of the standard error of the 'mean' of each group; (4) finding the difference in the 'means' between the groups of teachers being compared; (5) calculations of the standard error of difference in the 'means' of the two groups; and (6) the computations of the "t" scores.

The "t" score is essentially the same measure as the critical ratio with the exception that the former is a technique devised for treating small samples. The "t" score is a measure which tests the "null-hypothesis." This hypothesis assumes that there is no true or real difference between the groups and that the samples are random and differ only in errors of sampling. The "t" value is used as a challenge to the "null-hypothesis" and expresses in terms of probability the extent of difference between the two groups.

The Findings

On the basis of the findings of this study it was concluded that there are significant differences in the activities

carried on by teachers of agriculture in the state of Georgia who have a Master's degree from the activities carried on by teachers in the same field who have only a Bachelor's degree. There were found to exist five areas in which the differences in the activities of the two groups were large enough to be statistically significant. The Master's degree holders had a larger 'mean score' in each of these five areas.

The Master's degree group reported a 'mean' total of 40.81 adult farmers enrolled in classes, while the Bachelor's degree group had only 29.99 farmers enrolled in adult classes during the period studied. The Master's degree group devoted more time to actual organized adult farmer class instruction, expending an average of 3.94 hours per month at such work, as compared with 2.90 hours per month by the Bachelor's degree group for purpose of instructing adult farmers in organized classes. This was the greatest difference between the two groups divulged by the study. The Master's degree holders also conducted more adult farmer meetings. This group of teachers conducted an average of 1.78 adult farmer meetings per month, while the Bachelor's degree holders conducted 1.38 such meetings per month.

It was found that an average of 17.80 hours per month was expended by the teachers with a Master's degree for the purpose of on-the-farm supervision of adult farmer class members' work. The corresponding number of hours per month devoted to this work by the Bachelor's degree group was 10.76.

A significant difference was also found in the number of FFA meetings conducted per month by each of the two groups of teachers. The Master's degree teachers on an average devoted time to 1.66 FFA meetings per month, while the Bachelor's degree group was active in holding an average of only 1.35 FFA meetings per month.

Partly because of the small sampling of teachers used in the study and partly because of other factors, comparisons of the two groups of teachers in other areas of activities did not produce differences which were statistically reliable. There seems to be, however, definite indications that some of the differences discovered between the two groups in other areas of activities carried on are large enough to be of some importance. The Master's degree teachers had fewer in-school students enrolled in classes than did the Bachelor's degree teachers. The Master's degree teachers devoted less time than did the Bachelor's degree teachers to the following areas of instruction: (1) individual, (2) day-unit classes, and (3) persons not enrolled in organized classes.

The Master's degree teachers, in general, devoted more time to on-the-farm supervision than did the Bachelor's degree holders. The Master's degree holders devoted less time to "other school activities" than did the Bachelor's degree holders. The teachers with a Master's degree kept the necessary records and made reports in less time than was required for the Bachelor's degree holders.

(Continued on Page 230)



Few teachers develop the intimate relationships with the family so important in achieving general education outcomes as the Vo-Ag teacher. While seeking to accomplish his vocational goals, the teacher should be aware of his other opportunities.



As the Vo-Ag teacher works with the boy and the parent in the environment of their occupation, he has unlimited opportunity for creating a sense of relationship to the various goals of general education.

The role of the teacher of vocational agriculture in general education

A cooperative relationship in the school which the Vo-Ag teacher should not overlook

A. L. WINSOR, Director, School of Education, Cornell University

TO appreciate the opportunity of the teacher of Vocational Agriculture in the field of General Education it is important to review various conceptions of the meaning and scope of this type of education, and to examine the outcomes it hopes to achieve. According to the Harvard Report, the term General Education "... is used to indicate that part of a student's whole education which looks first of all to his life as a responsible human being and citizen." According to the Committee of the American Council on Education, General Education refers to those phases of non-specialized and non-vocational education that should be the common possession, the common denominator, so to speak, of educated persons as individuals and as citizens of a free society. According to the President's Commission on Higher Education it is the task of General Education to provide the kinds of learning and experience that will enable the student to achieve such outcomes as the following:

1. To develop for the regulation of one's personal and civic life a code of behavior based on ethical principles consistent with democratic ideals.

2. To participate actively as an informed and responsible citizen in solving the social, economic, and political problems of one's community, state and nation.

3. To recognize the interdependence of the different peoples of the world and one's personal responsibility for fostering international understanding and peace.

4. To understand the common phenomena in one's physical environment, to apply habits of scientific thought to

both personal and civic problems, and to appreciate the implications of scientific discoveries for human welfare.

5. To understand the ideas of others and to express one's own effectively.

6. To attain a satisfactory emotional and social adjustment.

7. To maintain and improve his own health and to cooperate actively and intelligently in solving community health problems.

8. To understand and enjoy literature, art, music, and other cultural activities as expressions of personal and social experience, and to participate to some extent in some form of creative activity.

9. To acquire the knowledge and attitudes basic to a satisfying family life.

10. To choose a socially useful and personally satisfying vocation that will permit one to use to the full his particular interests and abilities.

11. To acquire and use the skills and habits involved in critical and constructive thinking.

It is obvious from an analysis of these definitions and objectives that general education involves much more than conveying knowledge or developing skills. It is expected to arouse interests, develop understandings and appreciations and establish attitudes, values and ideals.

Mastery of Information Is Not Enough

It is equally clear that these goals cannot be attained through course offerings alone. An effective program of general education must involve the social, recreational, religious, and academic activities of the school under the leader-

ship of teachers concerned with attaining these outcomes.

Because of the nature of the learning process, that teacher who works closest to his students will exercise the greatest influence on their general education whether he is in a vocational or an academic field. Individual contacts such as may be provided in laboratory or field work offer unusual opportunity for the teacher to relate the content of the course to the practical, social, civic or personal problems of the student. He will have an opportunity to develop such basic qualities in his students as orderliness, cooperation, reliability, loyalty, thrift, and tolerance. Through his example and thoughtful direction of activities he can in reality develop character in keeping with the needs of the local community as well as the demands of citizenship in the world.

Opportunities Through Vocational Agriculture

It is deceptively simple to assume that general education can be attained through the development of a set of courses no matter what the arrangement of content may be. In many institutions adjustment toward more effective general education has taken the form of curriculum revision with emphasis on the humanities and social sciences or with extensive survey courses. It is our opinion that this is only one and not the most fruitful approach to the problem. The outcomes sought through general education can best be attained by the right kind of human relationship. The intimate relationship of the teacher of vocational agriculture to the boy, his family, and his problems affords a kind of situation seldom found in educational institutions for effective general education. If to this is added the opportunity the agriculture student has of working out of doors, of understanding and appreciating his physical environment, of applying habits of scientific thought to his daily work under wise supervision, the opportunity for wholesale development is unlimited.

Each student must be made to see his vocational or professional responsibility

(Continued on Page 230)

Every teacher has need for - -

A functional philosophy of education

HOWARD W. DEEMS, Teacher Education, University of Nebraska, and
RAYMOND J. AGAN, Teacher Education, Oregon State College



Howard W. Deems

TEACHER training institutions desire to provide instructional programs that will stimulate and guide their trainees in activities that lead to effective performance. An educational system can be no better than the teachers that conduct classes. The quality of teaching depends to a large extent upon the training institution. One of the difficult problems in this training program is the development of ways and means of interpreting to college students a functional philosophy of education.

The practice of requiring a course in philosophy taught by a philosopher, appears to be only a partial answer to the question. A student's point of view toward education may be influenced in many ways, such as attending college, taking educational courses, visiting schools, teaching under supervision, reading, and talking with people. Teaching methods and procedures are studied, discussed and observed. The same is true in curriculum construction, classroom management, student evaluation and supervision. However, the development of an educational philosophy at the present time appears to be left to the student, to other people, or to chance. Today the new teacher needs, as never before, an adequate philosophy of education. It must be his own philosophy based upon his own thinking and his own testing. It must be sound enough to give him strength of purpose and a sense of right direction. It must help him steer a straight course toward worthy goals.

Prospective Teachers Need Guidance

In a society where conflict is rampant, it appears impractical to allow future teachers to develop an educational philosophy without proper help and guidance.

In developing a philosophy of education it is fundamental that beginning teachers understand learning, how it takes place and what the results of learning are to be.

The belief in vocational education is that all genuine education comes about through experience. However, not all experiences are genuinely or equally educative.

Vocational education is simple in principle but not easy to develop. It may be a more difficult task to work out methods and procedures for vocational learning activities than for lessons of the traditional book assignment type.

Increased Interest in Education

People are interested in education. National magazines are featuring articles on public schools. Local districts are voting bonds for new buildings. Groups of lay people are discussing teachers



Raymond J. Agan

and teaching. This year's class of college graduates in education will go into communities next summer or next fall as educational leaders. Directed to them will be questions from the laymen, from the school administration and from fellow workers. They may appear to be minor questions. The answer given may be the result of only a moment's thought. The teacher without an educational philosophy may in a few months time find himself tied with many tiny threads of "weak answers." The teacher may, during the first few months on the job develop a philosophy that is narrow and shallow. It may be one that is negative, one that is merely a "wind vane" or one that leads to an educational grave.

It is the duty of every teacher to make sure that the part of the public with which he works understands the function of the school. The teacher must meet the public on a common level and be willing and eager to discuss educational problems. Too often, the teacher in talking with lay people volunteers information on the weather, livestock and the situation in the East, but when educational matters come up he moves to another group. This is not due to lack of interest in education; it is due to the fact that many teachers are not sure of themselves, or lack confidence in discussing everyday educational problems. Some teachers appear to have a self-conscious shame and embarrassment about their profession. A defensive position is assumed.

A Dedication to Purpose

A philosophy of education must be embedded in the souls of future teachers so that they go out into the world, not as invalids in a protected corner, not cowards fleeing before a revolution, but guides, builders and leaders obeying an impulse to help the world advance (apologies to Emerson).

The task of public education is widening. The wise administrator finds his educational bearing in the life of the community. Most vocational teachers

have an awareness of the life and needs of the community. This must be shared with the administration in a professional way. Statements of philosophy become useful when expressed in educational activity of the school. Extra hours, summer work and other procedures peculiar to vocational work must be justified in terms of education.

The impact of present-day economic, social, and political movements upon youth has brought about a recognition that subject matter taught in the school must help young people meet the problems of living in a modern world. Today, educational objectives grow out of needs of society. The public has demanded a better and a more inclusive school program for all youth.

Dependence on One's Philosophy

Good teaching is more than the mastery of important techniques. It involves an intelligent awareness of the purpose and direction of today's educational program. Teachers must know why they are teaching and the goals for which they are striving. The curriculum of the school includes all the activities that are provided for the students. It is by means of these activities that the school in terms of its purpose and philosophy endeavors to bring about changes in the behavior of students. It is, therefore, important that much consideration be given to the kind and organization of learning activities which are provided. The nature of the learner and the basic principles of effective learning must be of major concern to the educator. Direct first-hand experience should play the dominant role in the curriculum. It is easy for new teachers to get lost in the classroom. Good teaching requires a sound philosophy. The effectiveness of one's work is influenced by well-founded concepts of the function of education. Objectives to strive toward might include the following:

1. To develop with beginning teachers a philosophy of education that will enable them to look upon their profession with pride, confidence and enthusiasm.
2. To develop a willingness on the part of beginning teachers to avoid a text book type of instruction and to experiment intelligently with new and proven ideas of learning.
3. To develop with beginning teachers an intelligent awareness of the purpose and direction of the pupil-experience program of today's schools.
4. To develop with beginning teachers a philosophy that is not stable and dogmatic, but flexible and amenable to education as a continuous process in a rapidly changing world.
5. To develop with beginning teachers a philosophy of education which is a crystallization of the will of the social group and the ideals and aspirations of educational leaders.
6. To develop with beginning teachers an understanding of the aims and purposes of vocational education and to establish the place of vocational education in the school program. □

Teaching increases in professional status
when relationships are recognized and understood

Superintendent or teacher?

A Panacea

W. M. PEES, Superintendent, Wauseon Public Schools, Wauseon, Ohio, and
AUSTIN E. RITCHIE, Teacher Education, Ohio State University



W. M. Pees

THE phrase "Getting off on the right foot with the school administrator" is a premise seldom examined fully. The assumption that some school administrators are frequently under attack by insidious criticisms leveled by the teacher of vocational agriculture is too frequently accepted along with the converse.

The writers believe the issue is a minor one and realize it is unfortunate that one hears more about the undesirable than the desirable professional relationships. Nevertheless, teachers of vocational agriculture should endeavor to

purify their side of the issue through ardent and pragmatic action.

Perhaps every teacher should give pause and review his views toward improved professional relationships. The succeeding suggestions are submitted for your meditation.

Appreciate the Administrator's Duties

Teachers should develop an awareness and appreciation of some major problems which the administrator may be facing such as: securing an adequate supply of teachers, getting adequate financial support, preparing students for a complex society, developing a functional curriculum, conducting a public relations program, increasing enrollment, redistricting and consolidation, and increasing pressures by various groups. Supplement the major problems with the meticulous details such as: student behavioral problems, teacher morale, parent complaints, and routine records and reports. Cognizance of the school administrator's many functions may explain an apparent lack of interest in vocational agriculture.



Austin E. Ritchie

Mediate Differences

Typical, perhaps, are the current reactionary differences which stem from the diversity of views between the teacher and the school administrator. The diversity of views denotes freedom and stimulation in education so long as there is understanding and appreciation for each other's views. The willingness of each to mediate these differences is essential to desirable professional relationships. Compromise and cooperation are basic ingredients in any functioning democratic school organization.

Be on the Faculty

Avoidance in being a lone practitioner or one who is vacillating and weak is the removal of a block between the teacher and administrator. Essentials of satisfactory faculty relationships are apparent when the teacher assumes his fair share of school duties, is interested in each teacher's program, recognizes contributions to vocational agriculture by the other teachers, and is a moral credit to the profession. Cooperate with

the appropriate teacher in the use of school facilities and equipment such as those from the audio-visual aids, commercial, athletic, and home economics departments. Likewise, other teachers should feel welcome to use the facilities of the vocational agriculture department or to request assistance from the vocational agriculture teacher. Such working relationships absolve much friction amongst the faculty, thus freeing the administrator's attention for other pertinent matters.

Let the Administrator Know

The coordination of a school program is partially dependent upon the teacher keeping the school administrator informed regarding the vocational agriculture program and his activities. Submitting and soliciting suggestions for developing the programs of instruction for high school classes, the Future Farmer program, the adult education program, the public relations, and farming programs contribute to this end. Secure approval for special requests well in advance and make arrangements for students, equipment, or whatever the occasion calls for. Notify the administrator regarding students' or teachers' achievements and awards so that the patrons of the school can be informed of the quality of its school, particularly the vocational agriculture department.

Justify Expenditures

Usually, considerable money is spent for a classroom, shop, equipment, and references for vocational agriculture. When funds are available, seldom does the school administrator resent expenditures of this nature. Likewise, the school administrator can expect the physical facilities to be arranged practically and attractively, and used appropriately. When the teacher requisitions equipment, references, and so forth he should amply justify the need to the school administrator.

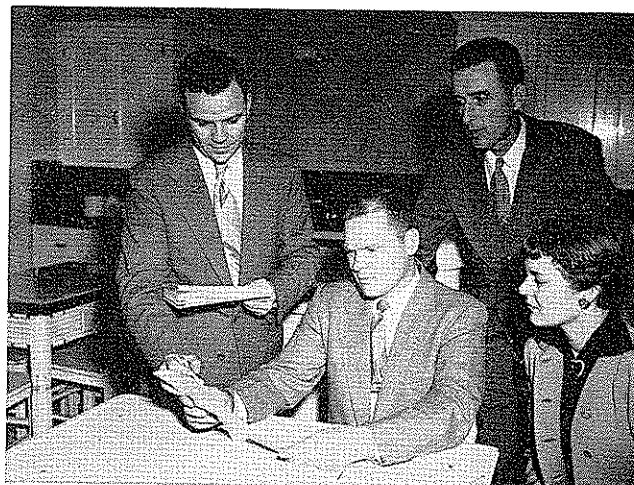
Handle Your Own Discipline

The perennial problem of undesirable student and teacher relationships be-

(Continued on Page 236)



Teacher keeps superintendent informed while inspecting new references and equipment. Left to right: W. M. Pees, Superintendent, and Earl Kantner, Teacher, Wauseon, Ohio, gain a mutual understanding of needs and their importance.



Other teachers cooperate in planning the FFA Parent and Son Banquet. Left to right, seated: Earl Kantner, Vocational Agriculture, Martha Baden, Home Economics. Standing: Robert Ruhlman, Commercial, and W. M. Pees, Superintendent, Wauseon, Ohio.

Should you be a teacher of reading, too?

A teacher has a variety of opportunities.

ORVILLE E. THOMPSON, Teacher Education, University of California



Orville E. Thompson

There are times when you, the teacher of vocational agriculture, are justified in wondering what is going to be expected of you next. Everyone is anxious to add activities but no one offers to lessen the load. Should you now take on the duties of a teacher of reading? Maybe you should first decide if you need to be a teacher of reading. Are your pupils able to read at a speed adequate to complete their assignments with ease? Do all of the students comprehend what they have read? If such is the case, you are very fortunate. If not, then perhaps you have an obligation to do something about it. No, you probably shouldn't assume the role of a teacher of reading, as such. However, there are some rather ordinary things you can do which will help your pupils with their reading.

Present Ability Should Be Known

Certainly if you truly want to help your pupils in reading you will need to start by knowing their present ability. The following are some suggestions for obtaining this information. The procedure of listening to oral reading or observing how rapidly the individual completes a designated speed passage will give some indication of his reading speed, but, knowing reading speed alone is not enough. You should supplement this with some questions which will give an indication of how well the pupil comprehended what he had read. This method, crude as it may seem, is one common measure of reading ability, even though it presents several shortcomings. First, it gives you only the comparison of the ability of one pupil against the others in the class without actually knowing the pupil's reading grade level. You still won't know whether the pupil is reading up to standard for his grade. Second, there is a danger that the questions directed to measure comprehension may not measure that ability at all, in which case your measure of this ability would be erroneous. Third, the topic used for reading may not be of equal interest to all the pupils and thereby may lessen the reliability of the comprehension measure. This procedure should be used only when other measures of reading ability, such as reliable standardized reading tests, are not available. If your school has a guidance department, reading test results for each pupil may be in the cumulative folders. If these tests have been taken within the past two years the results usually can be used

with confidence. However, if they are more than two years old the scores may not be a reliable measure of present ability. These standardized reading tests ordinarily will be of either the diagnostic or survey type, each giving an indication of ability. If you do not have standardized test results and you desire to give the test yourself, the survey type may be advisable since you probably would prefer a measure of general ability rather than a diagnosis of reading difficulties. One which yields a reading grade level for the individual pupil is usually preferred. Many standardized reading tests are available. Therefore, competent assistance should be sought in selecting one appropriate for your use.

Relation to Intelligence

In addition to this measure of reading ability an intelligence score, preferably one resulting from a test measuring non-linguistic ability, is very helpful. Too often the pupil who is a poor reader is stamped as a dullard. This is not always true. A recent survey of 192 pupils enrolled in Agriculture II in 19 New York high schools, where the Co-operative English Test was used to measure reading ability, exemplified this. It was found that while these pupils were nearing completion of the 10th grade in school, the mean reading ability for the group was only slightly above the 8th grade level when compared to the test norms. Individuals within the group ranged in ability from the 1st percentile for the 7th grade norm group to the 99th percentile for the 12th grade group. It was interesting to find that the mental ability of these pupils, as determined by the California Capacity Questionnaire, showed that they had an average intelligence quotient of 103, which for all general purposes can be considered average or a little above. Observation of the individual scores showed that a number of the pupils who were average or above in intelligence were low in reading ability. What can be concluded from these data? Simply this: that as far as this group is concerned the pupils are under-achievers in reading. It could be expected that in general they are capable of reading up to grade level.

Relation to Grade Level

Another point illustrated which may be even more important to you as a teacher of vocational agriculture is the range in reading ability within this group. A breakdown of the reading ability to grade level of these 192 tenth-grade pupils revealed that 36, or 1 out of 6, were below the mean for 7th grade level in reading ability; another 105, or about 1 out of every 2, were reading between the 7th and 9th grade level; while 12, or 1 out of 16, were at 11th

or 12th grade levels. Eight ranked well above the norms for 12th grade pupils. A range of 3 to 5 grade levels in reading ability was found to prevail in each of these 19 classes.

What is being done in the vocational agriculture classroom to take care of this range in reading ability? Certainly the pupil with the low reading ability should not be expected to read the same material that is appropriate for pupils who are far in advance of their grade. The reverse is also true, those materials appropriate for the lower level will be simple and perhaps boring to its counterpart.

What Can Be Done?

Once you know the reading ability and mental ability of the pupils, what can you do next? First of all you should not get carried away by the conditions existing in your class and undertake a reading improvement program to bring each pupil up to a point where he is reading to the best of his ability. This is a job for specialists and requires much more time than you have available. Yet there are some activities which you can initiate with a minimum of extra effort on your part that will bring results. The following are some examples.

1. Take special care in teaching pupils the vocabulary which is common to the vocation of agriculture. Take stock of those agricultural terms used in class and in reference materials. Make certain the pupils know the new words used in each lesson. It might be interesting to have some students, especially lower class members, define some of the agricultural terms, the meanings of which we take for granted they know. Try it sometime. An understanding of all these terms is essential before reading comprehension can be complete. In addition to improving comprehension, reading speed will be increased when the pupil doesn't have to stumble over words.

2. Screen reference materials and rate them according to reading difficulty. Several common procedures for determining this reading difficulty have been used successfully.

- a. Several formulas such as the Flesch and Lorge have been developed for use in arriving at a reading difficulty index for specific materials. These take into consideration difficulty of words, length of sentences, and number of prepositional phrases. Any one of these formulas when used on random samples of the article being analyzed yields a rating of reading difficulty. This procedure is used extensively and is considered a reliable measure. None of these mechanical processes, however, is able to take into account the context of the sentence which is so very important in determining reading difficulty. An example of the use of the Flesch formula can be found in the research in reading difficulty of commonly used references in vocational agriculture by Christianson.¹

(Continued on Page 231)

¹Christianson, Howard. "Selecting Reading Materials for our Students." *Agricultural Education*, Vol. 26:262, May 1954.

Teaching brings increased satisfactions when proper understandings are brought about.

Make a good start

Here are some ideas to emphasize and some suggestions of ways to do it.

A. H. HUMMELL, Vo-Ag Instructor, Freeport, Ohio



A. H. Hummell

THESE are a number of ways to indoctrinate students and their parents with the objectives and procedures used in the development of a student's farming program. Farm visits in July and August made by the instructor to prospective students are a *must*

to establish good working relationships. However, a special parent's meeting held shortly after the opening of school has developed some understandings at Freeport which could not be brought about at the farms. Both the students and their parents (or those legally responsible) and the superintendent were invited to this meeting.

The meeting was divided into four main areas:

- I. Introduction, by the local teacher.
- II. The place of Vocational Agriculture in the High School Curriculum—local superintendent.
- III. Future Farmers of America—local FFA Officers and State Treasurer.
- IV. Developing Satisfactory Farming Programs—local teacher.

Opening the Meeting

The local teacher acted as master of ceremonies. During the introduction he brought out the general objectives of education and the requirements of Vocational success as outlined in *Teaching Procedures in Developing Boys Through The Use of Their Farming Programs*, 1940, by E. O. Bolender, C. E. Rhoad and H. G. Kenestrick, Department of Agricultural Education, The Ohio State University, Columbus, Ohio.

The first stage of this presentation is shown in the picture above. In this picture, Civic Relationships, one of the factors in The Requirements of a Satisfactory Life, graph "A," is being exposed. This circle graph is constructed so that all the factors were hidden in the beginning as illustrated in the chart above labeled, A Successful Farmer. It is made so that, as the cover is rotated, the factors can be exposed one by one.

Using a Mechanical Aid

The circle graph "A" is constructed as follows (See Figure 1). A circle fifteen inches in diameter is drawn with blue show-card paint on gold "tag" stock sixteen inches by twenty-three inches. The small five-inch circle is next drawn

using the same center as was used for the fifteen-inch circle. The space between the two circles is divided into eight equal parts and the factors are lettered in these parts as shown in graph "A."

The cover "B", fifteen and one-half inches in diameter, is cut from blue "tag" stock and a cut is made along one of the radii to the center. Graph "A" is also cut from the edge, along the line separating the factor Home Life and the question mark, to the center.

The cover is then placed over the circle of graph "A" so the circles will be concentric. A paper pin is forced through both pieces of "tag" stock at the center. This forms a bearing about which the cover can be turned. The cover is rotated till its cut is exactly at the same place as the cut in "A." Cover "B" is then turned clockwise starting the top at the cut down through "A." It is slipped in back of the part of "A" below its cut radius. Now as cover "B" is turned clockwise each factor can be exposed at the correct time. By the time all factors are exposed the whole cover is worked behind the graph and the entire chart is exposed.

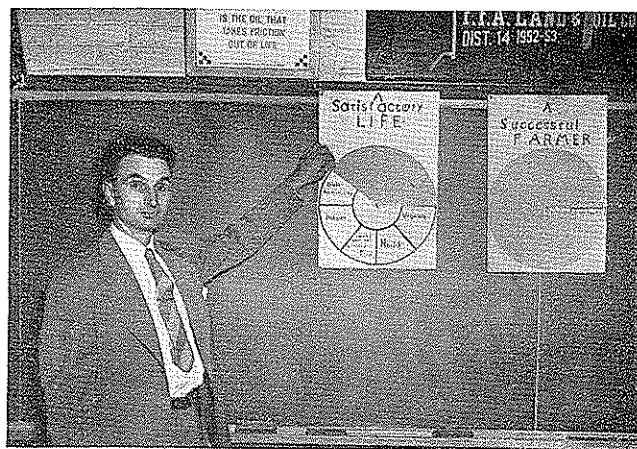
Graph "D" is constructed to be used in the same manner as Graph "A."

Before each part is exposed lead questions are raised in order to bring out the factor. The magic way the facts are revealed holds the attention of the audience and the factors on the chart serve as the outline for this part of the presentation.

If some of your group will be seated more than twenty feet from your graphs they should be larger than fifteen inches in diameter so the lettering can be seen clearly.

Explain School Relationships

Mr. E. W. Roman, Superintendent of Freeport Public Schools, very well explained that vo-



Requirements for success are shown.

ational agriculture was a year-round course requiring regular farm visits by the teacher and that it earned for the student one and one-fourth credits toward graduation as compared to one credit for the academic subjects. He also pointed out the fact that it required two forty-five minute periods because of the nature of the work and he explained the five different subjects a boy majoring in vocational agriculture should elect.

The FFA Program

President James Clay explained the four degrees of membership in the FFA, their requirements and the various activities in the local program of work. He also introduced the local officers and gave the names of the State officers and National president. He next introduced Robert Bond, State FFA Treasurer. Robert told what he had for his farming program and how it helped him to earn the State Farmer Degree. He also pointed out the requirements for a state officer and his qualifications for being elected State Treasurer for Ohio.

Describe Satisfactory Farming Programs

Our flannelboard was used to get the most done in a short time, and the teach-

(Continued on Page 228)

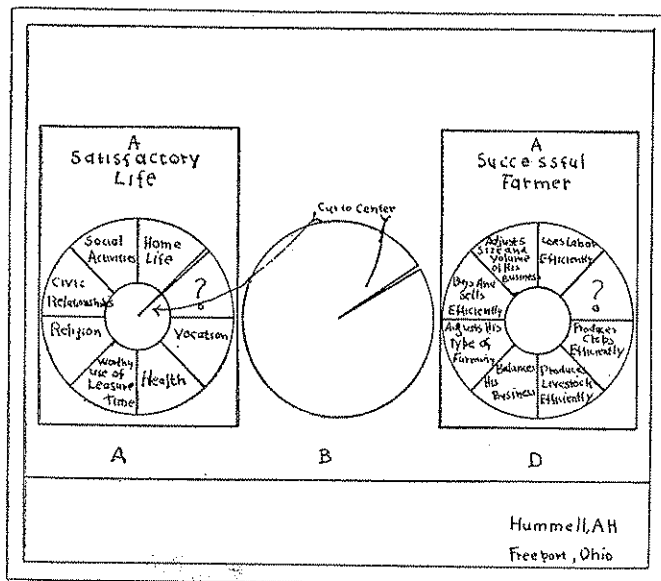


Fig. 1.

Hummell, A.H.
Freeport, Ohio

ing was made much more effective with the use of this attention-getter. Have you wished you could build your ideas before your students? If you have, then just give this tool a chance to help you get your work done more effectively.

With the aid of the flannelgraph the local teacher next outlined the desired outcome of four years of vocational agriculture at Freeport. The following outline was used:

A Good Farming Program Will—

- I. Help me get started in farming (if affirmative answers are possible).
 1. Be interesting to me.
 2. Give me a chance to gain or lose.
 3. Can I do most of the work and all the management?
 4. Can I keep the project separate and distinct from the other farm enterprises?
 5. Will it teach me new abilities and skills?
 6. Will it be able to run a full cycle of production?
 7. Does it have my parents' approval?
- II. Stand as Sound farm business (when I can say 'Yes' to the following).
 1. Are the projects practical in size, not too large to be discouraging but large enough to keep me busy?
 2. Does the program provide a fair division of costs and returns?
 3. Does each project stand a good chance to return a profit?
 4. Does each project fit in with the kind of farming carried on at home?
 5. Does it make use of land and buildings available?
- III. Improve the Home Farm, by
 1. Adding to the total farm income.
 2. Introducing new ideas.
 3. Fitting in with the kind of farming carried on at home.
 - a. Feeds, lands, buildings and equipment available.
 - b. No interference with a well established and well developed enterprise on the farm.
 - c. Breed, variety or kind of crops is adapted to home conditions.

The Heading and the main points I, II and III were placed on the flannelboard and the points under each area were brought out, when possible, through discussion.

Picturing the Total Program

Next a painting of an average freshman starting in vocational agriculture at Freeport in 1953 was placed in the upper left hand corner of the board and a card with only a question mark was placed in the upper right hand corner of the board under the date 1957 to indicate that there was a question as to what he should be like and how he would change in appearance as a senior (See Figure 2). The board was built up step by step until the group wanted to see the plus Senior. However, he was not shown till the very last, in order to hold the interest of the boys and their parents.

For the last part of this presentation white baby ribbon with Flock-Tite on the back was used to make the lines on the flannelboard to portray the four year farming program step by step (See Figure 3). Characters to represent different parts of the farming program were placed on the flannelboard as shown. The final step was to reveal the picture of the Plus Senior. This picture is the last stage in the presentation of getting started in farming through farming programs.

Source of Materials Used

For this presentation an Educator's Vidio-graph Kit was purchased for \$10.75 from Florez Incorporated, 815 Bates Street, Detroit 26, Michigan. However, if you prefer you can buy ready made boards in various sizes from \$4.39 at Nasco to \$49.50 from Florez Inc. The author much prefers the Flock-Tite backing sold by Florez Inc., because of its convenience in saving time for the busy agriculture teacher.

In presenting this part of the story on flannel the following simple rules were followed in order to make sure the presentation would be smooth and effective.

Some Rules to Follow

The board was first located where it could be seen by everyone. It was placed at just above the eye level of the audience and braced so that it slanted backwards about ten degrees. This helped to hold the symbols in place. Since this teacher is right handed he placed his board to his right. He always stood at one side of his board.

Before the presentation each symbol was checked for flatness so it would come in contact with the board. If the symbol is warped or bent it may fall off. A warped symbol can be flexed to make it straight.

The symbols were arranged in the proper order. They were grouped in order of appearance and placed between the leaves of a magazine. This makes it possible to turn the leaves of the magazine and find each group of symbols ready to place on the board. It also helps to keep them flat.

The symbols were placed tightly against the board in order to bring about a firm contact between symbol and board. This seems to arouse the curiosity of the audience and helped to hold their interest. Each card was concealed until the exact moment when it was needed. When possible the symbol was placed on the board a fraction of a second before actually reading it or making reference to it.

In using the flannelboard, as in black-board work, the teacher must keep facing his audience. With most characters it was not necessary to use both hands in putting them on the board. By using one hand the teacher could remain facing the audience as he put the symbol in place.

The teacher tried to keep talking as he removed the symbols for the next part of the presentation. He used the removal of the symbols as an occasion for a quick summary. As he took down each symbol he briefly mentioned the point with which it dealt.

This method of communicating ideas with pictures or printed words adhering to verticle cloth is by no means new. Eighteenth Century Missionaries used it to hold the attention of natives in illustrating the Bible parables. Cotton flannel sheets from the mission hospitals were used for the background and pictures or words were backed with fine sandpaper. The "G. I." blanket was used as late as World War II for the same purpose. As others have said the possibilities of the flannelgraph are unlimited. Try it for yourself. The plan outlined above is not *the* plan, rather it is *a* plan. Give it a try and modify it to suit your own local conditions. □

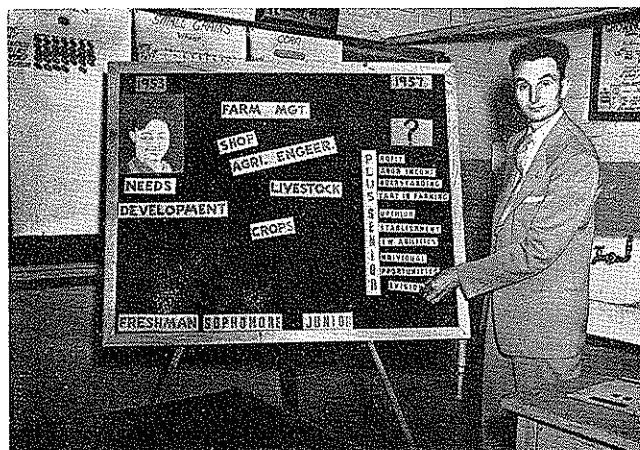


Fig. 2.



Fig. 3.

If you can write a good letter—

You can write a professional article

..... Here's how

DALE W. ANDREWS, Teacher Education,
California State Polytechnic College



Dale W. Andrews

YOU may find this difficult to believe but more than 70 per cent of the articles which appear in magazines have been written by people that have never had an article printed previously. Most of us 'freeze' at the thought of our writing appearing in print,

but we shouldn't. Actually, if you can carry on a conversation you can write! Most writers are just common folk like you and me who have an idea to share.

Over half of the articles that appear in the *Agricultural Education Magazine* are written by agriculture teachers, but not much more than half. In some instances the agriculture teacher can and does do better writing than the state supervisory staff members or teacher trainers. Writing a good article begins with ideas. The alert teacher has lots of ideas. The teacher does not have to seek material for the article; he is close to much varied and interesting activity.

"What is in it for me?" you may say. Not payment if you are writing for professional publications, but it will improve you as a teacher and as a person. If you want to help others, this is one way to do it—share your ideas with others. It has been said that the best way to be selfish is to be unselfish. It applies here because by sharing your ideas you automatically will be improving yourself and increasing your professional status. Writing will improve you as a person and it will make of you a better teacher.

"What Shall I Write About?"

It stands to reason that it is best to select a subject about which you know something. When writing for the *Agricultural Education Magazine*, remember that most agriculture teachers are interested in reading "ways and means" articles rather than "philosophy-type articles."

The easiest kind of article is one in which you present what somebody is doing—a good teaching technique, a new approach, things you see, accomplishments, a successful Chapter or student project, solutions to Ag-teacher problems, how you or another Ag teacher have been able to demonstrate a piece of work. Nearly all Vo-Ag teachers share common problems. This is the clue to whether the idea, activity or problem is worth an article: "Is it of

general interest?" One of the best sources of usable new ideas is to read about what someone else is doing. And someone has to contribute an idea before the other person can read it.

An advantage in writing about what somebody is doing is that you have something to back up every statement. In writing about what people do, however, avoid hyperboles. Don't say, "he is the only one that is doing this," or "this is the best." Say, "he has been highly successful in doing this."

"How Do I Go About Writing an Article?"

A good professional article may be nothing more than a planned interesting letter. Letters are usually more interesting than articles because the writer is just talking on paper to a person. Think of a specific teacher whom you want to help and write him a planned letter. Then strike out the salutation and complimentary ending and there is your professional article. Before writing this planned letter, you had better make an outline. This will insure more continuity. You aren't so apt to forget things and at the same time you can put in order the main things you want to develop.

Every magazine has its own style and unique characteristics. When you choose the magazine you limit yourself somewhat as to style, length of article, and approach. You will want to check the magazine on such things as sentence length and paragraph length and then write accordingly. Try to hit the general style format of the magazine. Does the magazine use pictures?

Begin your article with a short introduction, a paragraph or two "selling" someone on reading your article. Self-explanatory pictures help do this too. You must be able to persuade the reader that your article is worth reading. The title or by-line may do. Your lead sentence and your lead paragraph are a most important part of your story because they either attract or repel your reader. The rest of the "letter" is much easier once you have the lead paragraph finished.

You often crumple up a finished or half-finished letter and start over. You

DEAR JOE ---

You asked me
to tell you how I
got so many good
Farm projects.
This is how I did it
First ----

Sincerely
Dale

A good professional article may be nothing more than a planned interesting letter. Think of a specific teacher whom you want to help and write him a planned letter. Then strike out the salutation and complimentary ending and there is your professional article.

may have to do the same with this "letter." Don't be afraid to revise or start over—to rewrite the whole story or any of its parts. If you want to write a good professional article, be self-critical. Seek criticism from others. After all, the story must appeal to others not just to you. This, however, doesn't mean your writing should necessarily please your readers, but you should feel that it will help and/or stimulate your fellow vocational agriculture teachers.

In telling your story, use a variety of sentences, most of them short. Twenty words is a fairly long sentence and seventy-five words is a long paragraph. Don't write a rambling letter. Keep it simple and to the point. If you want your letter really to help your correspondent, present only a few ideas and explain them in detail. "Tell well what you are telling," is a good rule-of-thumb for length. Two and one-half pages typed double-spaced is a nice length. But, if you have a story to tell and it is really good—the magazine will serialize it.

End your article with one or two paragraphs summarizing to your reader the application of what he read in your article. This is a way of making him happy he has read the "letter." Sometimes you may want to put that "modest success through cooperation and old-fashioned hard work" philosophy in your endings. Or you may use that "self-help, community help, group effort, constructive activity, will help others" business at the end. Articles can effectively be concluded with a summarizing sentence, a quotation, a striking or challenging statement, a call to action, or with any one of a number of other devices. Which you use is not important. What is of consequence, though, is that

(Continued on Page 236)

A teacher responds to a point of view.

Power tools belong

Where do you stand on this issue?

JAMES H. DICE, Farm Shop Instructor, Austin, Minn.

IN rebuttal to the article in the January, 1955, issue called "Where Are We Going With Power Tools?", may I say that I disagree with the ideas expressed by Kenneth L. Russell. To me, Prof. Russell's point of view is shocking and represents a negative, unimaginative and defeatist outlook. Among other things, Mr. Russell is against jointers because someone might get hurt. Says Mr. Russell, "I see fingers missing." He speaks of learning to use hand tools and teaching their maintenance as though this was something extremely difficult and the main objective of the Farm Mechanics course. He speaks of birdhouses, book-cases and walnut chests with the reverence of a woodworking instructor. To prove his point Mr. Russell says, "My experiences with hand tools as a youth in the construction of bird houses played no small part in my ability to plan, supervise and finish my own home."

Mr. Russell's philosophy that we should teach farm boys to use hand tools because that is what they have at home belongs to the age of the horse and buggy. Today our stores are filled with stationary and portable electric power tools priced within the budget of any successful farmer. Vo-Ag teachers should accept the challenge to show the farmer what can be done with these tools. Industry doesn't wait for the farmer to demand new equipment and methods before they start manufacturing and developing them. Many of our most promising technological advances in agriculture were visualized by industry, developed and sold to the farmer.

What Are the Objectives?

The teaching objectives of any Vo-Ag department must be based on the economic facts of farming, that a farm business must be large enough to enable the farm manager to use the modern methods of industrialized farming. Boys from small, inefficient farms should be encouraged to find other occupations. Training farm boys to use modern power tools and encouraging them to develop a power and maintenance center on their home farm is just as sound and necessary as encouraging them to keep farm records, or adopt other modern farm management methods. The fact that most farms do not have a modern power and maintenance center should become a *challenge* to every Vo-Ag teacher instead of an excuse for not developing a strong pace-setting farm mechanics program for his community. If the Vo-Ag department does not now have a farm shop, it should become the No. 1 challenge for the local Vo-Ag teacher to build and develop such a shop.

We must always keep in mind that

Farm Mechanics is a *Vocational* subject. We are training boys for the vocation of farming, or related farm occupations. Teaching farm boys to use hand tools is a necessary fundamental training. However, it is the beginning and not the end objective. A strong vocational farm shop program includes training in metal-work, arc and gas welding, carpentry, tractor and machinery mechanics, metal fabrication, rural electricity and thorough training in the use of portable and stationary power tools.

Outlets for Those Trained

Most Vo-Ag departments have some "town boys," and a large number (perhaps 50%) of boys from small inefficient farms who will never become established in farming. These boys must find other occupations. Agricultural mechanics instruction of the type visualized by the capable progressive shop instructor can help many of these boys find other employment. For a moment, let us consider the many agriculturally-related occupations in our farm areas where training in Farm Mechanics would be extremely important. These farm-related businesses use modern power tools and the latest equipment. Competition demands it. Just naming a few of such businesses: lumber yards, machine shops, garages, farm machinery repair shops, welding shops, sales and supply businesses, contractors, carpenters, hardware stores, etc. These businesses are searching for employees with the skills and know-how usually taught to students by the progressive Farm Shop teacher.

Permit me an aside. The Vo-Ag department in the majority of our rural areas has a wonderful opportunity to give shop training which is truly vocational. Most rural high schools offer only hand tool instruction. The areas of vocational metal work, welding, engine mechanics, carpentry, wood and steel fabrication, and the use of portable electric hand tools is untouched. I believe that the school board or superintendent who hires a Vo-Ag teacher is entitled to a competent, aggressive teacher who has come to the community to lead and inspire—a teacher who can rise above the many obstacles and discouragements experienced by all those who accept the challenge of leadership in rural areas. Leaders in Vocational Agriculture must resolve their differences about farm mechanics and what should be taught. We should present a forward-looking, united front. I favor a strong program stressing portable electric power tools for the farm power maintenance center. I favor a school shop with enough equipment that genuine vocational shop training can take place.

A Comparison - -

(Continued from Page 222)

Teachers who possessed a Master's degree devoted more time to professional improvement activities than did the teachers who held only a Bachelor's degree.

Information concerning the salaries of teachers of agriculture showed that the Master's degree holders were receiving an average monthly salary of \$410.95, while the Bachelor's degree holders were paid an average of \$359.61 per month. This indicated by comparison with the state's graduated salary schedule that the Master's degree holders were receiving slightly larger local supplements than were the Bachelor's degree teachers. □

The Role of the Teacher - -

(Continued from Page 223)

against the backdrop of his cultural pattern. The wise teacher or counselor will find opportunity in whatever field he teaches to work toward these goals. Through personal relationships in laboratories and small classes and through joint participation with them in outside activities, the vocational agriculture teacher can help his students to become responsible human beings and citizens.

Our Responsibility

As the greatest single force in the development and conservation of human resources, general education is of unsurpassed importance to our nation. In the ideological struggle in which we find ourselves it is essential that every opportunity for building loyal, effective citizens be given sharp and sure direction. Vocational and scientific groups have ascended to a position of dominance in our educational institutions and they must assume commensurate responsibility for preserving respect for human rights and fundamental freedoms as they teach if they are to discharge their responsibility to the public. □

Active members of the FFA, as of January 1, 1954, had \$87,848,282.23 invested in farming, an average of nearly \$240 per boy.

Here in Austin I tell my boys that if they learn how to weld and use the power tools available, anything is possible. They can build needed farm equipment out of wood or steel. They can do minor repair on their tractor, truck or farm machinery. Here in Austin we complete many varied projects such as tractor and farm machinery alteration and repair, and the building of trailers, wagons, hog feeders, water tanks, troughs, snow plows, saw horses, work benches, plus concrete masonry work, etc. Boys who have engaged in the above activities will be able to solve their many construction, maintenance and repair problems once they become full-time farmers. They can develop their own power and maintenance centers on their home farms and they will know how to equip the shop with power tools. □

To improve professional relationships—**Work with teachers and pupils of science**

PAUL F. SPRAGGS, Vo-Ag Instructor, Halifax, Virginia

COOOPERATING with science instructors and pupils in locating, collecting and utilizing specimens and objects of interest to them seems to be an avenue through which teachers of vocational agriculture might improve their professional relationships. This may stem from one or several of the reasons that follow:

1. Many science teachers are interested, as are their counterparts in vocational agriculture, in making maximum use of illustrative materials found in the local community for enriching the learning experiences of pupils. Any assistance given them or their pupils in locating, collecting or utilizing such materials is usually much appreciated.

2. A large number of the specimens used in science classes are relatively expensive if purchased properly mounted or preserved. This being true, instructors frequently experience difficulties in securing sufficient funds to purchase as many of the sundry samples as they need for instructional purposes. With few exceptions, therefore, they are thankful of any help from the Vo-Ag teacher which enables them to make their school dollar buy more of the goods deemed essential for optimum teaching and learning.

3. Numerous teachers—and those of science by no means in the majority—do not understand the mission of vocational education in agriculture. In some instances they are only minutely aware of the vast examples of applied biology, chemistry and physics the instructors of agriculture bring to their occupation. What has been said of teachers in this respect is applicable to many pupils. This is understandable, for the broadness of program of a great number of secondary schools renders it possible for many pupils to complete their courses of study without contacting tutors of agriculture in any professional way.

4. Professional relationships seem to improve in an environment permeated with shared experiences—a situation where teachers, pupils and administrators have developed “team pull” in accomplishing educational endeavors and objectives.

What, then, can the vocational agriculture teacher do along the lines suggested earlier in this writing—that of cooperating with science teachers and pupils in locating, collecting and utilizing materials—so as to enhance professional relationships? Several follow:

1. Instructors of agriculture may make available to their fellow teachers illustrative materials they have collected which might be valuable to them. (This does not mean *give*.) Where interest is shown, teachers might offer assistance in locating and collecting similar and other samples. Here are listed a few of the many materials that instructors of

agriculture have, or can secure, that might be made available: specimens of fruits, vegetables and crops—healthy, diseased and damaged by insects—as might grow in the community; samples of forestry products; examples of insects of crops and parasites of animals; samples of kinds of soils and rocks found in the locality and examples of materials, like hybrids and new varieties of grasses, that are revolutionizing the agricultural industry.

2. He can team up with science teachers in presenting certain lessons to pupils with a scientific tinge: e.g., controlling insects and diseases; reducing erosion; propagating plants.

3. Where feasible, he might work with science teachers and pupils in planning field trips, preparing exhibits and demonstrations.

4. Through his NFA or FFA, he might work to encourage science pupils to exhibit their insect, weed and other science collections in the school fair. Where no opportunity exists for such, he might work with the instructors of science to bring it about.

5. He can lend his aid in securing agricultural bulletins that might be needed by science classes and he can make available whatever books and materials he might have on collecting aids. Some good books for this are:

- a. Phipps—Handbook On Teaching Vocational Agriculture, pp. 916-928.
- b. Ekstrom—Teaching Aids In Vocational Agriculture, pp. 13-16.
- c. Swain—The Insect Guide, pp. 217-226.
- d. Yearbook of Agriculture, 1952, pp. 65-78. □

Should you teach reading?

(Continued from Page 226)

b. Another acceptable means is to have students with known reading abilities actually read passages aloud from each article. Use the results of these readings as an index for assessing reading difficulty to each of the articles.

c. A very practical method to find reading difficulty is for the teacher to study the materials carefully and evaluate them as to grade level. You may wish to test some of the grade placements on students that are reading at that particular grade level. Maybe another agriculture teacher could check on a few of these ratings.

3. Another practice is to section the class on the basis of reading ability and use reading materials appropriate to each section. This is done extensively using intelligence as a basis. Using reading ability may be more realistic. The use of materials found to be the least difficult for the lower section and the more difficult for the other groups could be carried out in the same classroom once you knew the reading ability of each pupil and the reading difficulty of each reference article.

Importance of Interest

One point that should not be overlooked in the process of attempting to match reading materials with reading ability of the individual is his interest. The fact that an article is rated for pupils at the 8th grade level of reading doesn't insure that it is interesting to all pupils with this level of ability. In other words, interest level may be more closely related to the pupil's actual age than his reading grade level.

These suggestions may not improve the reading ability of your pupils directly. However, this approach will help to enhance the pupils' interest in reading. If your pupils have a good grasp of the agricultural vocabulary used in class and found in their reading, if they are reading materials which they can comprehend, and if they aren't forced to compete unduly with others who are far

Guest Editorial - -

(Continued from Page 219)

my opinion that currently not enough people grow up on the farm. Vocational agriculture in high school provides an incentive that should stimulate qualified farm youth to return to the farm. The national problem of agriculture, be it in good times or bad, is to make farm life more attractive and more rewarding.

If these things are to be accomplished, it will require the united action of vocational agriculture, agricultural colleges, and most important of all, the farmers themselves, for the problem is in last analysis their own.

There is a legend in ancient India of a well-intentioned wise man and a scheming rascal who lived in the same community. The people naturally followed the advice and counsel of the wise man much to the chagrin of the rascal. Many times the knave had attempted to discredit the wise man, but each time he had been frustrated in the attempt. Finally he hit upon a plan which he felt sure could not fail. He accosted the good man one day when a large crowd was present. He said to him, “I hold in my hands a little bird, is it alive or is it dead?” Now if the wise man said it was dead, he intended to open his hands and let the bird fly away; on the other hand, if he said it was alive, he intended to squeeze the bird to death and drop its lifeless form at the feet of the wise man. So he repeated, “Is this bird alive or is it dead?” Without a moment's hesitation the wise man responded, “That sir is up to you.” The young men who live by the land should never make the mistake of thinking that their main problems will ever be solved by political or economic devices. □

their superior, they will be a much happier and more interested group. This will not cure the basic trouble but it will help the pupils achieve the maximum within their present ability. □

Learning can be fun

A goal for you as a teacher and a means to professional competence

PAUL M. HODGSON, Teacher Education, University of Delaware

THE statement "Learning Can Be Fun" will probably raise many questions in the reader's mind, such as: what do we mean by learning, when does learning take place, and is learning fun at all stages of the learning process? These and many more questions could be asked about the activity of learning and yet not answered to the satisfaction of all concerned. This is an area in which studies have not been made to give these specific answers, although many have considered the idea and many teachers are endeavoring to incorporate this idea into their classroom activities.

Educators today believe that the degree of learning which takes place on the part of an individual depends to a large extent upon the interest, enthusiasm, and industry or effort of that individual. Many writers have expressed this thought and have carried on studies at least part of which have either directly or indirectly made a contribution to this belief. Most studies have considered the topic from the point of view of the psychology of learning, but in more recent years consideration has been given to not only the psychological but the physiological relationship of the individual to the learning situation. This is emphasized by writers who point out that learning is based upon the complete individual: the skeletal frame, a nervous system, a system of muscles, a circulatory system, and a glandular system; and that the learner is active because of something within. They point out that an understanding of the entire structure of the individual is necessary for one who is trying to influence the educative process of people.

Kinds of Learning

Learning may be divided into two categories—informal and formal. A person is continually subjected to opportunities for informal learning through his environment, and this environment is continually acting upon the individual influencing his actions. This informal learning continues as long as one lives. Some of the specific ways of informal learning include radio, television, newspapers, advertising, billboards, etc. Informal learning tends to make people unlike because it is entirely self directed (of course subject to normal pressures of life situations but still based upon individual decision).

In the formal learning situation a teacher is present and plans the activities, and is responsible for the instruction causing all people to follow through in a more or less uniform manner. Formal learning tends to make people alike because it is directed by others.

Since the work of the educator is chiefly through the formal type of

learning this phase will be emphasized with consideration given to information and studies about the learner—what he is, how he learns, and how he becomes interested—in an effort to show that learning for the individual can be fun. Since the success of this formal instruction depends largely upon the type of pupil-teacher relationship, the teacher's part in this learning situation will be considered briefly here. Since most of the organized learning time of children in today's schools is spent within a classroom, it seems logical that one should consider this classroom—this center of learning—in terms of the degree to which it furnishes opportunities for the personal and social development and growth of children. What takes place within the classroom depends upon many factors but is largely influenced by the philosophy of the teacher and the type of pupil-teacher relationship which he is able to develop. The classroom activities, including the teacher, the children, the materials, projects, techniques, etc., indicate to an observer (visitor in the classroom) the kind of pupil-teacher relationship which exists. This learning situation is referred to by some as "the social climate of a classroom." If the reader is interested in a rapport scale for measuring the social climate in the classroom one is included in Wrightstone's study.

Magill in his "Introduction to the Art of Instruction" states the functions of the instructor as those of stimulating the learner to appropriate activity; guiding the learner in the course of this activity (helping him to avoid mistakes and to profit from those he makes); helping the learner to evaluate his progress in learning; helping the learner to organize his learnings in an orderly system which is readily available on demand; and providing the learner with a hygienic environment in which all learning activities can be carried on efficiently. He further indicates that vigorous activity on the part of the learner must come through the learner's interest, which may be developed in various ways. This development of interest will depend largely upon the understanding which the teacher has of the learner and how he learns. Magill refers to the instructor's relation to the learner and the necessity for the learner to be in tune with the instructor as a means of insuring that his nervous system becomes active and learning results. He points out the three basic ways through which an instructor directs the activity of the learner: speech, writing and demonstration.

The learner whom we have previously considered as the complete individual from a physiological standpoint may be considered the sum total of what he

starts out to be plus what happens to him along the way. He may be defined as a self-mover, who is more complex and versatile than the mechanical automobile, and who possesses higher powers which are entirely beyond the nature of any mechanism.

The learner has certain urges which if capitalized upon in the teaching situation can be used to stimulate his activity, and through this activity satisfactory accomplishment or learning may take place. The more a teacher considers the way in which the individual becomes interested and learns, the better he should be able to plan the work so that the resulting activity could be identified as fun. From a physiological standpoint the learner's activity is based largely upon nerve patterns which are built in reactions or instincts, plus nerve patterns built by experience from external stimulus which we may call habits. The individual is a combination of the physiological and psychological characteristics upon which the instructor uses his best efforts to stimulate and guide his behavior in the direction of definite learning situations or goals.

In order to make learning fun the teacher must understand how the learner becomes interested and capitalize on this knowledge by using it efficiently at every possible opportunity. The teacher must know the difference and characteristics between instinctive (internal) action and habit (external) formation, and control situations for stimulating and satisfying urges of the individual. For example: If curiosity is aroused and internal unbalance is created it should be satisfied before the teacher expects to get attention on some other question. The biggest problem is to know why people do what they do and how one should go about getting them to do what one thinks they should do. Interest must be developed in the learner through motivation or a reason. The stronger the motive the greater the degree of action; the greater the action the more the learning. The combination of instincts plus learning-nerve-patterns may be developed or modified. Instinctual behavior must be modified in line with the pattern of society in which one finds himself. This modification is called learning regardless of where or how it takes place—whether it be formal or informal. This learning may be fun depending greatly upon the experiences during the learning process but depending more upon the satisfaction of a job well done for a continuing as well as immediate pleasure. Magill states that "the basis of a learner's interest in a learning activity lies in the prospect that the activity will help him to satisfy his desires. To the extent that an activity promises to increase the learning power, to satisfy his curiosity, his ambition, or . . . to bring him satisfaction and to avoid unpleasant consequences, to that extent and no further will the learner find interest in the activity." Another statement which he makes about how an individual learns is ". . . it is solely through his own activity that an individual learns. Any activity of the instructor influences the learning only

to the extent that it results in activity on the part of the learner."

Another author says that success and failure are functions of self-involvement and where no goal is set or no aspiration is held there cannot be a feeling of success or failure. Ryans in writing the introduction to the chapter on "Motivation in Learning" considers motivation "simply as one of the conditions upon which learning is dependent." He also recognizes the physiological importance by including in part: there must be energy changes in the environment, internal and/or external. He stresses that motivation has to do with the why of behavior and states: "Conditions within the organism which produce increased activity and which give direction to behavior . . . attitudes, interests, and purposes serve similarly to arouse activity . . . preparatory adjustments may be either intentional or involuntary . . . behavior is influenced to an appreciable degree by . . . activity in progress . . . they function as *preparatory sets* . . . the sets give direction to behavior . . . provides adjustments favorable to a pattern of activity." In further discussing the terms motive and drive he indicates that they refer to the same phenomena and they contribute to the preparatory set of the individual. He quotes a description of a motive as "a state or set of the individual which disposes him for certain behavior and for seeking certain goals . . . a motive, or drive, releases some of the organism's store of energy and directs it into a certain channel."

Later he states that: "If human learning is in progress, the operation or drives may be inferred when: (1) other things being equal, the efficiency of learning is increased; (2) the learning activity is characterized by persistence; (3) the individual expresses interest, satisfaction, desire, etc." "Thus, the extent to which an individual will exert himself to attain a goal, as revealed in greater efficiency in learning when certain presumed motivational situations are introduced may be taken as a criterion of motivation." In commenting on motivation in the classroom one finds "Classroom teaching and pupil learning cannot be simply a matter of presentation of material to be learned. The introduction of incentives, development of motives, and the utilization of motives provide opportunities for the teacher to teach; their employment in learning marks the difference between a teacher and a text book, or between a good teacher and a poor teacher." Another author brings out the point that for the discovery of basic interests and aptitudes upon which sound vocational choice could be based they have found that voluntary work done in free time rather than in formal required exploratory courses handled in a mechanical fashion were less distasteful to the pupils and more effective.

All of the reference material and study point to the immenseness of the responsibility which rests upon the teacher to understand the whole individual both psychologically and physiologically, and to incorporate into his teaching those

kinds of techniques which will be interesting to, and involve the student in, learning activities where he can attain success and thus be stimulated toward further learning and be able to honestly say from his experience that "Learning Can Be Fun."

Bibliography

1. Bayles, Ernest E., *The Theory and Practice of Teaching*. New York: Harper & Brothers, 1950.
2. Colvin, Stephen S. and Bagley, William C., *Human Behavior*. New York: The MacMillan Company, 1913.
3. Douglas, O. B. and Holland, B. F., *Fundamentals of Educational Psychology*. New York: The MacMillan Company, 1938.
4. Douglass, Harl R., Editor, *Education for Life Adjustment*. New York: The Ronald Press Company, 1950.
5. Guilford, J. P., *Fundamental Statistics in Psychology and Education*. New York: McGraw-Hill Book Company, 1950.
6. Hammonds, Carsie, *Teaching Agriculture*. New York: McGraw-Hill Book Company, 1950.
7. Henry, Nelson B., Editor, "The Psychology of Learning," *Forty-First Yearbook of the National Society for the Study of Education*, University of Chicago Press, 1942.
8. Lippitt, Ronald, "An Experimental Study of Authoritarian and Democratic Group Atmosphere." *University of Iowa Studies in Child Welfare*, 1940.
9. Magill, Walter H., *Administering Vocational Education*. Philadelphia: Educational Publishers Inc., 1941. □

Editorial - -

(Continued from Page 219)

vocational agriculture *really means*. I believe you were referring to my September Occupational Studies issue in the final paragraph of your letter. Yes, I have gathered a great deal of support for my concept that, because farmers are losing their distinction as the one, dominant factor in our great agricultural industry and because service agencies are rapidly expanding, why should we continue to recognize only one area of agriculture?

Now for my answer to your question, "how many vocations in agriculture can be prepared for in the rural community where departments of vocational agriculture are found?"

Well, Mr. Smith, that depends on where you feel the emphasis should be placed in vocational agriculture. To date, not enough emphasis has been placed on mechanization, although farming has already become a series of push-button operations. Your own Professor Foss of the Cornell agricultural engineering department is an advocate of the idea that vocational agriculture teachers should be training future farm

equipment dealers and service men. In fact, his thinking goes far beyond that of most Ag leaders by proposing that promising Ag students who show unusual interest in this area of agriculture be apprenticed out to local farm equipment dealers to receive *practical vocational training*.

But that is only one phase of agriculture. What area of agriculture is in more dire need for real professional training than agricultural marketing? How many co-ops have failed because their managers did not know the meaning of public relations . . . or the products they were handling . . . or a number of vital things they could have learned in high school?

I could go on and on. How many farm organizations and businesses have failed because of lack of agricultural know-how? Who is more capable of teaching future agricultural businessmen than the Vo-Ag teacher? Agricultural efficiency in general must be increased if the farmer is to receive his rightful share of the dollar. Thus vocational agriculture teachers should be concerned with all phases of agriculture—not just farming. Now your next question might be: How would I set-up such a Vo-Ag department? Well, that will demand much study, but I think each department should have three distinct areas of work: (1) farm mechanics, (2) general agriculture, (3) Vocational guidance.

Many agricultural occupations can be found under the first two broad classifications and many more will be created in coming years.

There are always boys who do not know what they'd like to do, but have a great deal of talent along certain lines. Vo-Ag teachers should be competent counselors. They should help boys pick their vocations, perhaps direct them to college for more intensive study. Good Vo-Ag teachers see as much or more of their students as their own parents. They should know what their boys are capable of achieving in life.

Now for your point that "we must not forget that vocational education embraces more than the secondary school level." I'm glad you brought that up . . .

Mr. Smith, how many lives have been snuffed out because some farm boy or adult was not properly indoctrinated in the use of farm chemicals? Now we're beginning to see huge anhydrous ammonia rigs entering the farm picture, more airplane spraying and even airplane fertilizer application. These are new agricultural occupations. Operators learn their business the trial-and-error method. Sometimes crops on the other side of the fence are ruined because drift was not taken into consideration. Man, what a terrible responsibility the Vo-Ag teacher has! Why should he not accept the *full challenge* as it presents itself? Why should he be content to operate like his predecessors did in the day of the horse? I am definitely planning to present Vo-Ag leaders with a program for the teaching

(Continued on Page 236)

Here is one teacher's analysis of his job to include relationships between the school and community.

What is my job?*

THE unsolved problem that confronts me as a leader in agricultural education is to be able to budget my available time so that I do justice to the main job and yet be able to fulfill the related responsibilities that seemingly are a part of the total job. It seems sometimes that the related aspects of the job are often more time-consuming than the main job. It seems further that the school and community desire the agricultural leader to participate in the sideline activities and responsibilities of agriculture. The real problem then is how thin can one safely spread himself in this "octopus type" job when one considers all the angles to it.

First, what is my job as I see it?

1. The main job is the teaching of seventy-five to eighty students enrolled in the Vo-Ag course in high school and developing satisfactory farming programs for each.
2. Provide seventy-two hours of adult and young farmer classes each year.
3. Perform any other duties assigned to me by the school that are in keeping with my contract job.
4. Promote a strong FFA Chapter.
5. Promote a strong program of Dairy Herd Improvement to develop efficiency in the No. 1 Wisconsin source of farm income.
6. Give assistance and direction to any other agricultural activity participated in by students or by the community—especially if it has educational value.
7. Help interpret vocational agriculture to the school and community to develop a broader understanding of rural-urban problems and bring about better public relations for agriculture in general and for the community specifically.

Secondly, what are the exact demands on my time?

1. School days: duty from 8:00 a.m. to 3:00 p.m. in the classroom. Noon hours from 11:30 a.m. to 1:00 p.m. often used for student help inasmuch as school busses leave at 3:00 p.m. The only available school time for FFA and Jr. D.H.I.A. work is during this hour.
2. Young farmer classes: Every first and third Tuesday evening from November through April; every third Tuesday from May through October.
3. Adult classes every Thursday night until the seventy-two hour time requirement is met.
4. A large amount of time is required for FFA activities beyond the time available in my noon hours—Chapter meetings, officer meetings, committee work, basketball, award applications, Rural Safety Programs.

*Taken from a paper prepared by A. B. Cordes, Vo-Ag Instructor, Eau Claire, Wis., and submitted by L. M. Sasman, Supervisor, Wisconsin.

5. Supervision of farming programs is limitless.

Third, what are the other demands on my time?

1. At school: duty at all home football games; duty at about half of all basketball games; my share of party duty at school social functions.
2. The Junior Livestock Show requires about fifteen days' time during the year.
3. County Junior Fair requires seven to eight days' time.
4. Summer conference of Agriculture teachers: five days.
5. FFA Summer Camping Trip: five days.
6. Jr. Leaders Association president's job: perhaps ten to twelve meetings of all kinds during the year.
7. Wisconsin State Fair-Youth Days: requires at least two days' time.

Fourth, what other activities should the agricultural leader participate in because of his position?

1. At school: professional organizations such as local and county teachers groups.
2. Vo-Ag—Extension groups.
3. Rural—urban groups.
4. Civic groups: Rotary, Kiwanis, Lions, Men's Club.
5. County Mobilization Committee.
6. Farm organization meetings (Farm Bureau here).
7. Rural school programs: P.T.A.
8. County Extension educational programs—Farm Institute.

Last, but not least, what other responsibilities has an instructor as an individual?

1. Professional improvement, through schools, by reading, by attending meetings.
2. The responsibilities to his own family circle.
3. The responsibilities to his church in whatever measure one is moved to participate.
4. Some responsibilities to himself to keep physically fit and temperamentally balanced.
5. An obligation to be an example of what he teaches—that life consists not only in being a more financially successful individual, but also a happier, well-adjusted citizen worthy of his home, his family, his community and his country. □

National FFA membership in 1954 reached a new record of 371,592, an increase of 8,223, or 2.26 per cent, over the previous year. There are 8,793 local FFA Chapters.

Students Decide Their Own Grade

ROY L. OSELLA, Graduate Student,
California State Polytechnic College



Roy L. Osella

ARE college students capable of deciding their own grade?

Teachers who feel doubtful about this question may be interested in the system used by one instructor at California State Polytechnic College. In this method the agricultural education students decide their final grade for the course.

This self-assigning of grades was developed through use of self-evaluating charts and other self-grading techniques. The need for a method of teaching prospective agriculture teachers the process of assigning grades to their future students was one reason for developing the procedure.

During the quarter each student is required to turn in various assignments; the instructor evaluates these by placing a letter grade on them. The final examination is given during the last week of regular classes. This gives the instructor time to have papers graded before the regularly scheduled examination period. All students must then report to class at the scheduled final examination hour for the purpose of reviewing their final examination papers and formulating final grades.

Each student is given a rexographed copy of the grade book in which the instructor has replaced names with letters in order to prevent any embarrassment or biased opinions. At this point the students decide on a specific assignment to use as a base. The values of all other assignments are decided in relation to the value of the base. Numerical values are given to each assignment. Each numerical value is varied until there is general agreement on it by the class.

After numerical evaluations are decided upon for each assignment, each member is given the task of arriving at the final grade for two class members (names replaced by letters). They then are asked to transpose each letter grade to its new numerical value so the total course points can be determined. By having each student work out two students' grades there is a double check of all mathematical work.

After all totals are completed they are arranged in order, starting from the highest and ending with the lowest. Percentages based on the total possible points are then figured. Agreement is reached as to how grades should be distributed and, from this, the final letter grade for each student is assigned according to the total points scored.

This grading system runs smoothly and efficiently on the college level and

(Continued on Page 236)

Ohio "Co-Op" leaders and Vo-Ag teachers plan for local activities

WALTER L. BLUCK, Executive Secretary,
Ohio Council of Farmer Cooperatives

SOME 18,000 adult, young farmer, and high school boys enrolled in vocational agriculture in Ohio will gain new knowledge and participating experience in marketing, credit and other phases of off-the-farm business as they study modern farm management this year.

Increased emphasis on farm business transactions is expected to result from a series of workshop conferences just completed in the fifteen Ohio Vo-Ag Districts. The meetings were attended by teachers and managers of farmer cooperatives serving each area. Beginning at Delaware, Ohio, on November 3, the series of conferences was concluded at Johnstown on December 7.

In all, 288 teachers of Vocational Agriculture—96% of the total force—participated in the workshops along with 347 representatives of farmer cooperatives and others. Average attendance was 44, the largest meeting being at Napoleon with 62 participating.

District Supervisors of Vocational Agriculture, D. R. Purkey, E. O. Bolender, F. J. Ruble, and J. E. Dougan, served as chairmen at each workshop at which an illustrated Guide for teachers was discussed and presented. This guide, "Working Together in Teaching Farm Marketing and Farm Cooperatives," records the successful experience of seven teachers working with local managers of farmer cooperatives in teaching off-the-farm business techniques as a part of farm management. This publication was edited by Dr. Ralph J. Woodin, Department of Agricultural Education,

The Ohio State University. The booklet was printed by the Ohio Council of Farmer Cooperatives for the Department of Agricultural Education for distribution to high school teachers.

Clarence A. Gehrig, recently appointed secretary of the Ohio Council of Farmer Cooperatives who will succeed Walter Bluck on January 1, presented a 30-minute flannelgraph lecture on "The American System of Private Enterprise" at each meeting. The lecture served to depict the contribution of all forms of private business enterprise in supplying goods and services to American families. Many county "co-op" groups plan to purchase the flannelgraph for use by high school departments of Vocational Agriculture.

A most important outgrowth of these conferences was that plans for effective use of facilities and personnel of farmer cooperatives in teaching farm management were worked out by teachers and farm business leaders in county conferences as a concluding feature of each meeting. Such plans ranged from tours of "co-op" livestock yards to plans for FFA members to run a local "co-op" for a day. Teachers were guests of the local cooperatives for the supper hour.

Suggested contests, with incentive awards, to increase student interest and participation to be sponsored by local



Walter Bluck, extreme left, points out some features of interest to Ohio delegates visiting the American Institute of Cooperation.

and regional cooperatives, were presented by Walter Bluck, retiring Secretary of the Council. Of three types of contests and activities presented, the teachers showed greatest interest in the "Information Please—Cooperative Quiz Contest" with 320 teachers indicating tentative participation by their department. A total of 176 teachers indicated interest in having a cooperative field day to observe actual farmer participation in local cooperative services. Under this plan teachers in a county would visit a selected farm where the farmer and his family would show how they make use of farm "co-ops" in carrying on their farming operations.

The Chapter Cooperative Leadership Contest developed by the American Institute of Cooperation attracted the interest of 166 instructors. All plans were tentative pending discussion and final decision by FFA Chapters.

Farmer cooperatives have provided trips to the American Institute of Cooperation for more than 100 Ohio FFA delegates since 1950. A delegate from the winning FFA Chapter in each Vo-Ag district in the state will receive a trip to the AIC Annual Meeting at Purdue University next August. □

Satisfaction in teaching comes when we understand our pupils

Is your job getting you down?

KENNETH J. LIGGETT, Vo-Ag Instructor, Woodstock, Vermont.

Do you have the feeling that trying to teach is useless—that boys have no desire to learn—that they are indifferent, and at times even rebellious? Perhaps we should stop and look at ourselves before blaming our students. Are you happy in your work—do you really teach, or do you furnish subject matter administered with doses of discipline and call it teaching?

Let's try to understand why boys act as they do, and perhaps our problem will diminish and our work be more rewarding.

Teen-age boys are living under a series of pressures and changes which they do not understand; pressures and changes which create problems that they cannot identify and they, therefore, cannot seek help and reassurance when it is most needed.

Enumeration shows three main areas wherein boys need help. First, they are developing physically—changes are occurring in their bodies which they do not understand and are oftentimes afraid to admit to themselves. The boy who suddenly becomes withdrawn and standoffish may be trying to cover up a personal embarrassment, and may be in need of a quiet discussion with someone who can give a clear explanation and understanding without causing further embarrassment.

Secondly, we find social pressures arising. A boy cannot understand why adults suddenly demand stricter adherence to social etiquette—why he must suddenly drop his noisy exuberance and become a quiet, polite, sophisticated young man? Why does the girl next door, who yesterday played first base,

suddenly refuse to talk with or have anything to do with the growing boy? These sudden changes need an explanation.

Arising from these first two pressures is the third and hardest to explain—the emotional pressure. How can you explain that the gang activities of yesterday are utterly distasteful today? How can you explain why yesterday's pal today seems so far away? How can you explain the feeling of devotion one minute and almost hate the next? What is the cause of this rapid change of feelings? Certainly they are bewildering to the developing boy.

If we realize the possible effects of these pressures, we may better understand the reactions of some of our students.

However, before we start analyzing our students perhaps we should look to ourselves. Do we really understand ourselves, or are we hiding behind an accepted social pattern. Perhaps in the student who irritates us the most we see our own frustrations and unanswered

(Continued on Page 236)

Editorial - -

(Continued from Page 233)

of all agricultural occupations. I'm committed to it. I have a deep love for vocational agriculture and the manner in which Vo-Ags are helping to maintain our valuable rural traditions. Perhaps my imagination appears to run away with me at times, but I don't wander off home base too far. I'm from a rural area—was born on a small North Dakota farm. I spent much time as a boy shocking wheat, barley and oats—shoveling grain, and herding cows. I operated two small weekly newspapers in North Dakota and worked on a larger South Dakota paper, later publishing a state agricultural magazine. I feel that I know farmers and farm kids. And some of the present trends I really despise, but we must accept them as reality. Farmers are no longer independent. I like to think of them as constituting the hub of the agricultural wheel, with the many agricultural trades and professions making up the spokes.

Now my final point: perhaps my "implication" that only farm boys are eligible for or can participate in vocational agriculture was a little strong. But how many "opportunities" can be readily obtained for the town or city boy who wants to farm? I'm afraid they are hardly worth mentioning. Now I could dwell on this point at length because it touches on a problem that I consider more important than farming itself. But I'll leave that for future dissertations.

Thanks for the opportunity to express my views.

Cordially yours,
Gordon L. Berg,
Editor

Superintendent or - -

(Continued from Page 225)

comes a pitfall for many teachers. A knowledge of school policy regarding student behavior, being an effective teacher, understanding student behavior, and having knowledge of a student's home background are some ingredients for minimizing or removing any serious problems with students. Don't shift this important responsibility to the school administrator or other faculty members.

Show Your Traits

Underrating the importance of personal traits is foolhardy. It seems plausible for a school administrator to expect such things as: contemporary dress, proper grooming, pleasing personality, manifest punctuality, reasonable persistence, intellectual integrity, and demonstrated leadership. The omission of any one reduces a teacher's professional credit.

Conduct a Total Vocational Agriculture Program

Basically, the teacher is employed to conduct a complete program of vocational agriculture which will contribute to the students' ability to earn a living and live a good life. Integrating this program with the total school program becomes a mutual responsibility of the teacher and administrator. The quality of a teacher's performance is reflected, partially at least, by his ability to organize effectively and to conduct effi-

ciently a total program of vocational agriculture in a school and community.

Be Professional

Learning is a life activity which involves cogent and active participation in in-service education. Many school administrators are aware of the need for teachers to keep abreast with professional and technical education developments. Professional improvement often starts at the local level where an excellent opportunity exists in faculty meetings for the teacher of vocational agriculture to gain the respect of his colleagues; and simultaneously stimulate their cognizance of the role of agriculture in the total educational panorama.

Membership in county, state, and national professional associations offers much for teacher effectiveness and teacher benefits. Joining these may prevent professional embarrassment to the administrator, thus becoming another means for fostering relationships.

Pursuance of at least a master's degree is an indicator of a teacher's sincere desire for professional improvement; however, it is not implied that professional growth should culminate with a degree, but, that teachers should continue to participate in workshops, read, travel, et cetera.

The preceding tenets are presented as a panacea to enhance teacher-administrator relationships through teacher effort. Such actions should lead to a more effective school program in which vocational agriculture is an important part. Likewise, it is hoped that school administrators will reciprocate these and other actions to promote desirable professionalism.

You can write - -

(Continued from Page 229)

you do not stop abruptly leaving the article dangling. Rounding off your composition is just as important as putting a ribbon and bow on a Christmas package.

"In What Form Should the Article Be Submitted?"

Hand in the manuscript typed, double-spaced on one side of paper that isn't glossy. Mimeograph paper is very suitable. Although the editor will supply the final title, you should suggest one and it should indicate the content of the article. Start your first page one-quarter way down the sheet; this leaves room for instructions by the editor to the printer. On the upper left-hand corner of the first page put the writer's name, job title, school, and address. It is a good idea to put this same information in abbreviated form on succeeding pages so if the manuscript gets separated, lost pages can be found and replaced. Submit a four-by-five black and white glossy-finish picture of the author with the article. If at all possible submit pictures to illustrate your ideas or accounts of activities. Type and clip an explanatory legend to each picture.

When you decide to try writing an article for the *Agricultural Education Magazine*, remember that the article-submission deadline is three months ahead of publication date. Review the

themes that are announced in the *Ag Ed Magazine* periodically (the April issue gives the yearly listing), then aim your article to fit one of these and give yourself a deadline. The index to the previous twelve issues of the Magazine appears every July. If you want to see what others have done or get ideas to reinforce your own, the index is the place to start your search.

If agriculture teachers—even a small number of them—would write one article a year, how many more good ideas would be shared to make the teaching efforts of all agriculture teachers more productive!

You may be a little skeptical, believing you cannot write an acceptable professional article. You may be right. But it is difficult to believe that a good teacher, one who has ideas and knows how to put them across in the classroom, is not smart enough to put some of his ideas on paper.

At any rate, you won't know whether what was presented in this article will work for you or not until you have tried it. I dare you to give it a whirl!

P.S. Drop me a line and let me know if you took my dare because I would appreciate seeing if my efforts here bore fruit and I know you can write a letter if you can write a professional article—and vice versa.

Students decide - -

(Continued from Page 234)

has qualities that should appeal to college instructors. A modified form may even be used by high school instructors.

I can truthfully say for my classmates and myself that the self-assigning system is the most democratic determination of grades that we have experienced. Furthermore, we believe that this is a desirable way for us to gain experience for use in grading our own future students.

With this unique method the students gain respect for grading and attain a feeling of satisfaction and understanding by sharing in determining class grades. By participating in the actual assignment of final grades the students obtain, in a real-life situation, the first-hand experience of grading which has an educational value that can only be fully developed with more experience.

Is your job getting you down?

(Continued from Page 235)

questions. Probably the reason he irritates us most is because we feel powerless to help him solve his problem.

To do a really effective job of teaching, we must be happy in our work. To be that way, we must understand our limitations; we must recognize those unanswered questions of our own that need attention. When we have straightened out our own thinking and we realize that the pattern of "Junior's" life is set before we know him, and that the small percentage of time that we have him will have little effect on his life we can and will improve our teaching because we will be much happier in our efforts.

Technical skills needed

By teachers of Vocational Agriculture

WALLACE H. ELLIOTT, Teacher Education, University of Maine



Wallace Elliott

TECHNICAL skills in forestry meet a definite need in the instructional programs of teachers of vocational agriculture in many communities in the North Atlantic Region. The importance of forestry in the Region was recognized when it was selected as one of

the seven subject-matter areas included in the Regional Project in "Technical Skills Needed by Teachers of Vocational Agriculture." A summary of the checklists returned by the teachers indicate that one-half of them teach some phase of forestry and use on the average approximately seventy of the 139 skills included in this subject-matter area.

The skills in the checklist sent to the teachers were arranged under eight major headings (Table I). From the data in this Table it appears that the proportion of teachers who used the skills, as classified, varied from a high average of 55.8 per cent for the group of skills under the heading, "Managing the Farm Woodlot," to a low average of 10.3 per cent for "Managing A Forest Nursery."

The place the teachers learned the skills for each group is also indicated in Table I. Examination of this summary indicates that teachers who learned the skills on the farm ranged from an average of 50.8 per cent to 7.9 per cent, depending on the area of instruction. Training in vocational agriculture provided experiences ranging from 22.8 per cent to 6.9 per cent. College courses accounted for training in these areas

ranging from 45 per cent to 8.2 per cent. It is significant that in-service (on the job) proficiency was acquired to a considerable degree, and ranged from 46.9 per cent to 24.3 per cent. In only two areas was in-service growth below 35 per cent.

Table I also shows the value placed on these areas by the teachers, which in turn reflects, to some degree, the importance of forestry in the communities served. The area, "Managing A Forest Nursery," received the most low value ratings (51.4 per cent), and the least in-service proficiency was acquired in this area. It should be noted that both vocational agriculture and college courses provided their highest percentages of learning in this specialized area.

The skills used the greatest number of times, under each of the eight major headings, are shown in Table II. The use of these specific skills varied from

a high of 88.7 per cent to a low of 14.5 per cent. The skill, "Sharpening An Axe," was the most used skill. It was likewise high in the "Farm Mechanics Area" of this study, (see article in December, 1954, issue), being second only in that portion of the study to "Sharpen a Cold Chisel." Therefore, it appears reasonable to assume there is some relationship between the two checklists for that skill. The transplanting of coniferous seedlings received the lowest use and value rating, on a percentage basis, of the skills used most in the eight groups. It appears in the area of "Managing A Forest Nursery," which also received the lowest percentages in Table I on these same items.

Analysis of the data in Tables I and II apparently confirms the observations made in the other subject-matter areas that the teachers who have acquired specific skills and use them have done so because there is a need for these skills in their respective communities, regardless of where the skill was learned. Likewise, the distribution of values reflects the need and importance of the skills regardless of where a specific skill was acquired.

The fact that forestry is more important in some states than in others, and

Table II—Responses of Teachers to Skills Taught by the Largest Number in Each of the Eight Major Headings, Showing Where These Skills Were Learned and the Value Placed Upon Them.*

| Skills Taught by the largest number of Teachers in each of the Eight Areas shown in Table I | Average Percentages of Teachers Who Taught these specific Skills | Distribution of Teachers by Average Percentages of the Value placed upon these Skills | | | Distribution of Teachers by Average Percentages of Where they learned these Skills | | | |
|---|--|---|--------|------|--|-----------|------------|------------|
| | | High | Medium | Low | On the Farm | In Vo-Ag. | In College | On the Job |
| | | | | | | | | |
| Sharpening an axe..... | 88.7 | 80.0 | 18.2 | 1.8 | 37.8 | 17.0 | 19.5 | 25.7 |
| Identification of trees..... | 80.6 | 78.8 | 21.2 | .0 | 23.5 | 8.6 | 43.2 | 24.7 |
| Identification, damage and control of common diseases..... | 59.7 | 55.3 | 38.3 | 6.4 | 6.0 | 6.0 | 46.0 | 42.0 |
| Estimating volumes of trees and stands..... | 51.7 | 80.5 | 14.6 | 4.9 | 14.9 | 6.4 | 36.2 | 42.5 |
| Planting trees for wind-breaks..... | 51.7 | 27.5 | 42.5 | 30.0 | 18.2 | 21.0 | 23.7 | 42.1 |
| Care and management of sugar bush..... | 42.0 | 42.9 | 37.1 | 20.0 | 34.5 | 10.3 | 10.3 | 44.9 |
| Treating wood properly..... | 24.2 | 63.0 | 26.0 | 11.0 | 10.0 | 20.0 | 20.0 | 50.0 |
| Transplanting coniferous seedlings..... | 14.5 | 23.3 | 30.0 | 46.7 | 8.3 | 16.7 | 41.7 | 33.3 |

*One from each area shown in Table I.

Table I—Summary of Technical Skills in the Area of Farm Woodlot Forestry Reported as Used by Teachers in the North Atlantic Region, Showing Where the Skills Were Learned and the Value Placed Upon Them*

| Major Headings under which the Skills Were Classified | Average Percentages of Teachers Who Taught Skills in each Area | Distribution of Teachers by Average Percentages of the Value placed upon the Skills | | | Distribution of Teachers by Average Percentages of Where they learned the Skills | | | |
|---|--|---|--------|------|--|-----------|------------|------------|
| | | High | Medium | Low | On the Farm | In Vo-Ag. | In College | On the Job |
| | | | | | | | | |
| Managing the farm woodlot..... | 55.8 | 65.5 | 26.6 | 7.9 | 15.8 | 8.5 | 37.2 | 38.5 |
| How to use tools and equipment..... | 47.3 | 56.3 | 29.4 | 14.3 | 50.8 | 8.1 | 16.6 | 24.5 |
| Production of maple products..... | 32.2 | 34.4 | 37.9 | 27.7 | 44.5 | 8.2 | 8.2 | 39.1 |
| Protecting the farm woodlot..... | 24.8 | 45.6 | 36.9 | 17.5 | 17.3 | 8.1 | 31.0 | 43.6 |
| Harvesting and marketing woodlot products..... | 23.4 | 46.0 | 28.2 | 25.8 | 30.3 | 6.9 | 21.6 | 41.2 |
| Miscellaneous..... | 16.3 | 20.1 | 35.7 | 44.2 | 22.3 | 13.7 | 24.5 | 39.5 |
| Harvesting and managing woodlot products..... | 15.6 | 47.0 | 25.6 | 27.4 | 16.7 | 20.8 | 15.6 | 46.9 |
| Managing a forest nursery..... | 10.3 | 27.0 | 21.6 | 51.4 | 7.9 | 22.8 | 45.0 | 24.3 |

*A copy of the detailed summary tabulation of the responses from 62 teachers to the 139 skills listed under these eight major headings is available upon request from the Department of Agricultural Education, University of Maine, 22 Agricultural Engineering Building, Orono, Maine.

varies by communities within a state, presents a greater problem of teacher preparation than the other subject-matter areas in this project. However, it is hoped that the need for additional training experiences in the area of forestry has been recognized and both pre-service and in-service training programs for vocational agriculture will provide opportunities for teachers to acquire greater proficiency in this subject-matter area. □

The May Issue will feature - -

Evaluating Programs in Vocational Agriculture

News and Views of the Profession

Retirement Announced



Dr. W. F. Stewart

AFTER 38 years of service to vocational education in agriculture in the Department of Agricultural Education at The Ohio State University, Dr. W. F. Stewart will be retiring, effective July 1, 1955. He initiated the program in Ohio in 1917, where he served as both Head Supervisor and Teacher Trainer. Three years previous to that he taught vocational agriculture in the high school at Tracy, Minnesota and during the period 1909 to 1913 he was the high school principal at Prophetstown, Illinois. He received his Master's at the University of Wisconsin and his Doctorate at Columbia University.

His many services include the vice-presidency of The American Vocational Association; Business Manager and Editor of *The Agricultural Education Magazine*; and addressing teachers' groups in about half the states. He has served as a visiting professor in Iowa, Missouri and Alabama. Nearly a half million copies of his booklet, *Helps in Mastering Parliamentary Procedure*, have been distributed throughout the United States. Another publication, *Methods of Good Teaching*, is likewise well received throughout the profession.

Through these many years he has made notable contributions in basic phi-

Dr. James Starrak

Dr. James Starrak, a member of the Vocational Education Department of Iowa State College since 1920, died January 22, at the age of 66. Born at Campbellton, New Brunswick, Canada, he taught in Canadian public schools and at MacDonald College at Quebec.

In 1922 he received a Master's Degree in Education from Iowa State and, in 1928, he was granted one of the first Doctor's degrees in Education awarded by Boston University.

Dr. Starrak was one of the early supervisors of student teachers in the department of vocational agriculture at Kelley, Iowa. For a number of years he was chairman of the curriculum committee of the Iowa State division of agriculture. A teacher-rating system, now widely used in public schools and colleges, was developed by him. He was a consultant to the first state commission on reorganization of school districts in Iowa and has served on several national councils dealing with rural agricultural education.

In addition to serving as co-author of several books in vocational education Dr. Starrak contributed to several bulletins of the Iowa Agricultural Experiment Station dealing with Agricultural Education. He frequently contributed to *Agricultural Education Magazine*.

losophy and methods used in agricultural education. He has been loyal to the purposes of the program and his services have been rendered unselfishly.

Montana FFA Backs Safety Drive

Twenty-five hundred Montana Future Farmers who are members of the Montana State Association of FFA and the national organization of FFA will make an intensive drive to help cut down death, injury, suffering and loss of property on the highways announced Art Johnson, State Advisor of the Montana Association of Future Farmers of America.

Future Farmers who are enrolled in vocational agriculture in sixty-two Montana high schools will ask members of their immediate families, their relatives and friends to help in this drive so that those who use our Montana highways will be more secure. Montana Future Farmers will encourage the cooperation and support of other youth and adult organizations in the rural and urban areas of Montana.

During the last convention of FFA, the delegates in session resolved to put on a hard hitting safety program during the year 1954-1955. A safe driving poster has been prepared which has been approved by the State Council of Safety and the State Highway Patrol. Future Farmers have offered their cooperation and support to these two organizations interested in safer driving conditions on the highways.

The slogan of the Montana Future Farmers safe driving program, "Keep to the right and be right," will help in this effort to make Montana highways safe. "Keep to the right" means to the right of the white line down the middle of the highway and "to be right" means the driver should be mentally and physically alert.

Each FFA Chapter has been asked to carry out at least one activity to insure safer driving. Some of these activities are: safety education programs, study and observe traffic regulations, all FFA members check their cars for faulty lights, brakes, tires or steering apparatus and inviting highway patrolmen to speak at school assemblies.

Montana Future Farmers are anxious to work with other groups and individuals in their efforts and they are also inviting all groups and individuals to work with them in their desire to cut down on the tragedies which occur daily on our highways. □

There are limitations to be observed in planning - - -

The farm mechanics program for today

PAUL JOHNSON, Vo-Ag Instructor, Buxton, Maine

WITH the trend towards more mechanization in farming the farm mechanics program has become increasingly important in the course in vocational agriculture. Have we changed our programs to keep in step with the changes in the highly mechanized farming of our time? Do we provide time to consider new methods of construction for farm buildings? Can we justify using time to teach forge work or should it be used to teach more on the use of the oxyacetylene torch and arc welding? These are but a few of the questions with which the teacher of agriculture is confronted.

There are suggested courses of study prepared by farm mechanics specialists in the United States Office of Education, and on the state level we find committees made up of teachers making recommendations as to what training should be offered in farm mechanics. It has been my experience that we attempt to put too much in the farm mechanics program. There may be a need for

training in the many skills, but there are some limiting factors to be considered: (1) amount of time available for farm mechanics in the four year course; (2) providing facilities and equipment; (3) technical training of the instructor.

Selection Is Necessary

A community survey to determine the kinds of farm mechanics jobs that are commonly done by farmers in the area should be made. This survey will undoubtedly show where farmers could be doing a better job of maintaining buildings and equipment if they had the benefit of more training. The idea of using the survey to determine what the farm mechanics course should offer is not new. However, it may be wise to consider it again since the use of prepared check-lists of skills that could be taught lends itself to be used as a list from which the instructor selects only those jobs that he is most competent to teach.

When it comes to the qualifications of the teacher, there are too many of us who are not adequately trained to teach

many of the skills which we know the boy should acquire. Much is being done to train better teachers by conducting summer Workshop courses, and it is encouraging to note that teacher training institutions are providing better farm shop courses.

Securing equipment and facilities is a real problem in the smaller school. Farm machinery dealers, the Soil Conservation Service, and local farmers are usually happy to cooperate and can be of real service to your department.

Build your farm mechanics program according to the needs of the farmers in your area. Take advantage of outside facilities, equipment, and technicians. And as a teacher improve yourself through "in-service" training. □



ENGINEERING FOR AGRICULTURAL DRAINAGE by Rae and Ayres, pp. 501, illustrated, published by McGraw-Hill Book Company, Inc., New York, price \$7.50.

Engineering for Agricultural Drainage is a technical book devoted entirely to the subject of drainage and factors affecting drainage such as soil and soil-moisture characteristics and behavior, rainfall and runoff, flow and measurement of water, crop-plant characteristics and growth, and irrigation as related to drainage. The design, construction, and maintenance of both surface and subsurface drainage methods are presented in separate chapters. Separate chapters are also devoted to drainage on irrigated lands and the soil-moisture control problem on peat and muck lands. The last two chapters deal with drainage cost and drainage administration and law.

The publication is well illustrated with pictures of drained and un-drained fields, and pictures of the equipment used in the construction of drainage systems. Tables, charts, and graphs help to clarify difficult points concerning the need for and construction of various parts of the different kinds of drains. The appendix includes a listing of the literature cited.

Harry Burgess Rae is Professor Emeritus of Agricultural Engineering, University of Minnesota. Quincy Claude Ayres is Professor of Agricultural Engineering, Iowa State College.

—A.H.K.

FOR MORE EFFECTIVE TEACHING by Alfred H. Krebs, pp. 136, published by The Interstate, Danville, Illinois. List Price, \$2.95.

The major purpose of the author in writing *For More Effective Teaching* is to explain and demonstrate a concept of a problem solving approach in teaching. The book contains chapters on: Planning, Some Illustrative Plans, Taking the Plan Into the Classroom, Trouble Spots, A Minimum Plan, Variations in Using A Problem Solving Approach in Teaching Adults, Theory and Practice, and A Final Word. Appendix A gives a course outline developed by a teacher of vocational agriculture. It is used to illustrate the manner in which he resolved the many conflicts confronting him in determining the problem areas to be included in his course of study. Appendix B shows how one teacher used a problem solving approach in teaching Chemistry. The chapter on Theory and Practice, for which Arthur Ward, presently Professor of Vocational Education at the University of Nebraska, is credited should be of special interest to those teachers who seek to acquire a better understanding of the theoretical aspects of problem solving. Also included in this chapter is a review of several related studies supporting prob-

Themes for Volume 28 of the Agricultural Education Magazine July, 1955 - June, 1956

July—*Individual On-farm Instruction*—to include: Follow-up of Out-of-school Students; Making Farm Visits; Planning Farm Visits; Recording and Summarizing Farm Visits; Purposes of Farm Visits; Relating Farm Visits to Group Instruction; Relationships with other Agencies; etc.

August—*Serving the School and Community*—to include: Fairs and Demonstrations; Programs of Publicity; Working with other Agencies; Participation in General School Duties; Developing Community Leadership; Relationships within the School; etc.

September—*Starting the New School Year*—to include: Organizing and Filing Materials; Obtaining Supplies and Facilities; School and Faculty Relationships; Organizing Classes; Methods of Instruction; Organizing and Using Advisory Groups; Classroom Management; Planning Course Content; etc.

October—*Knowing Your Pupils*—to include: Use of Testing Programs and Results; Classroom Management; Value of Home Visits; Pupil-teacher Relationships; Cooperation with Other Teachers; Teaching Techniques; Individualized Instruction; Recognizing Individual Differences; etc.

November—*Working with Out-of-School Groups*—to include: Planning Programs of Instruction; Organizing classes; Young Farmer Associations; On-farm Instruction; Evaluating Accomplishments; Relationships with

other Agencies; Promotional Activities; Using Advisory Groups; etc.

December—*The FFA Program*—to include: Local and State Organization; Programs of Work; Financing Local Programs; Contests, Exhibits and Demonstrations; Evaluation; Leadership Training; Membership Requirements; Relationship to the Vo-Ag Program; etc.

January—*The Farm Mechanics Program*—to include: Facilities and their Use; Selection of Instructional Content; Relationship with other Instruction; Safety; Organization; Teaching Procedures; New Developments; Use of Special Teachers; Means of Evaluation; etc.

February—*Professional Preparation and Improvement*—to include: Needs of Beginning Teachers; Means of Professional Improvement; Selection of Teachers; Professional Relationships; Professional Organizations; Improving Professional Status; Tenure of Teachers; Retirement Systems; etc.

March—*Individual Farming Programs*—to include: Planning Programs; Supervising Individual Programs; Relationship to Group Instruction; Problems of Non-farm Pupils; Evaluation of Programs; Relation to Establishment in Farming; Records and Accounts; etc.

April—*Educational and Vocational Guidance*—to include: Selecting Pupils in Vocational Agriculture; Relationships with the School Guidance Program; Means of Rendering Guidance Service; Use of Individual Pupil Records; General Agriculture versus Vocational Agriculture; etc.

May—*Evaluating Programs in Vocational Agriculture*—to include emphasis on evaluation of any phase of the total program—in-school instruction, the FFA, out-of-school groups, school and community activities, etc. (This issue will include the annual listing of research studies in progress.)

June—*The Summer Program*—to include: Program Planning; Community Activities; Camping and Recreation; Preparation for Fairs and Exhibits; Promotional Activities; Public Relations; Professional Improvement; etc. □

The Cover Picture

Directed or supervised individual study in the classroom is an effective technique of preparing pupils of Vo-Ag for performance. James Caves, an agricultural education trainee, is shown supervising individual study on selecting a high producing cow. He is obtaining this necessary experience in the Newton, Miss., Vo-Ag department with a second year class. His training experiences were supervised by W. T. Taylor, Vo-Ag instructor at Newton, who produced and furnished this picture.

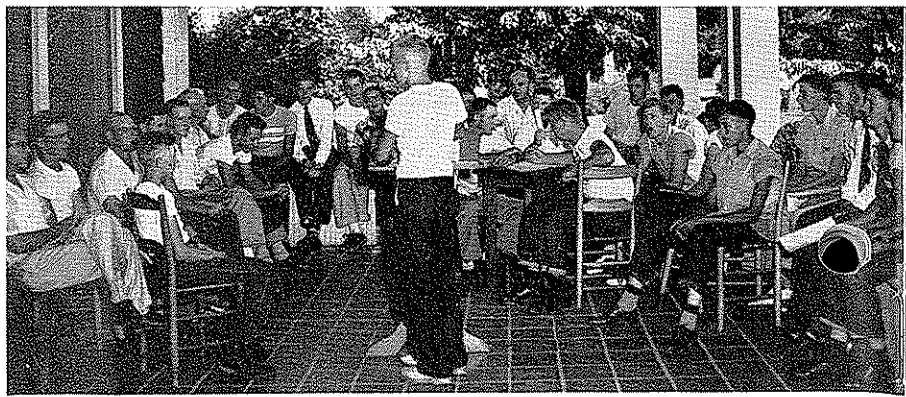
lem solving procedures. Animated drawings are used effectively throughout the book. The book should find extensive use in teacher education programs, and as a professional guide for all people who are concerned with improved methods and techniques in directing the learning process.

The author taught vocational agriculture in New York State and received his Ph.D. degree from Cornell University. He is at present on the Agricultural Education staff of the College of Education, University of Illinois. His qualifications both from the standpoint of experience and training give added meaning to the value of this book.

—R. W. B.

At the 27th annual national FFA convention six men were awarded special plaques for their service as chairmen of the Sponsoring Committee for the FFA Foundation. In the order of their service they were: Frank W. Jenks, vice-president, International Harvester Company; John H. Kraft, former Chairman of the Board, Kraft Foods Company; Raymond C. Firestone, executive vice-president, Firestone Tire & Rubber Company; Roger M. Kyes, vice-president, General Motors Corporation; Chester H. Lang, vice-president, General Electric Company, and W. A. Roberts, president, Allis-Chalmers Manufacturing Company.

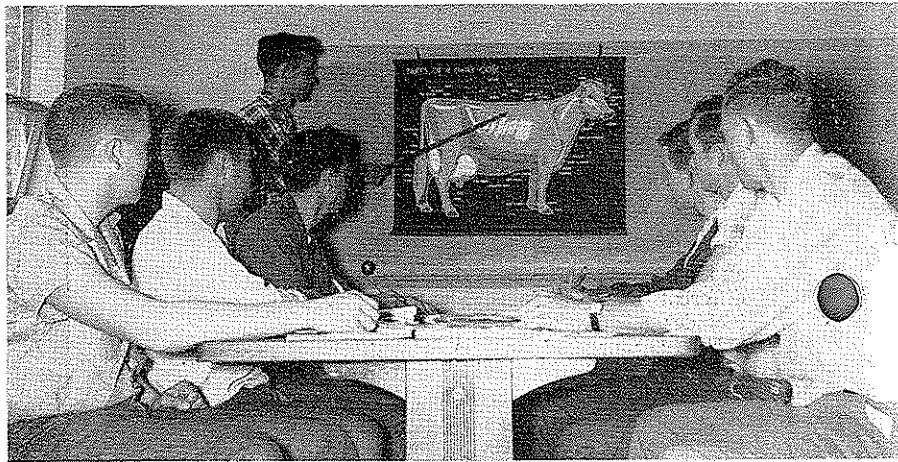
Stories in pictures



Leadership training is one of the major activities at the W. Va. State FFA Convention. The picture above shows one of the leadership classes with the FFA members participating in the discussion. A five-day conference is divided into leadership activities, business sessions, recreational activities and state contests. More than 400 FFA members participated in the leadership classes designed to improve the FFA chapters and members during the coming year.

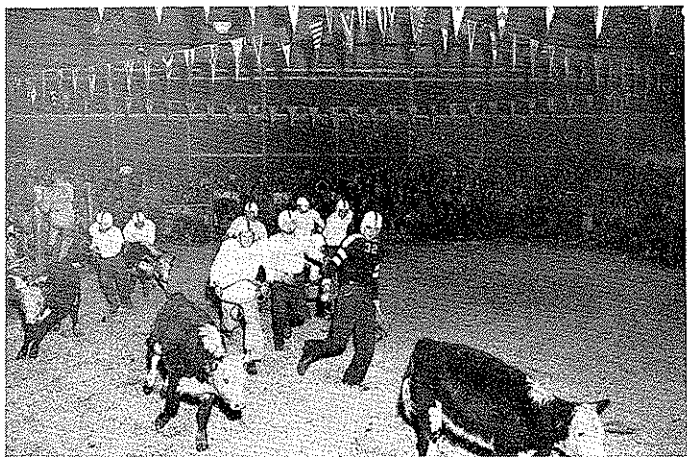


On November 30, Brush Motors of Middlebury, Vermont, presented the above 1955 half-ton pick-up truck to the Middlebury High School Vo-Ag department. Plans have been drawn up for a covered body for the truck. Seats will accommodate Vo-Ag students for field trips and other departmental work. The vehicle will also be used by the instructors in making farm visits to the students' farms. The practice of loaning trucks to Vo-Ag departments is fairly common in some western states but this is the first to be initiated in Vermont. Shown in the picture are Howard Brush of Brush Motors, Superintendent of Schools Ralph Eaton, and Vo-Ag Instructor Bruce Gaylord. (Photo courtesy of Veteran Ag Instructor Luther Chatfield.)



Agricultural education trainees are taught to use visual aids effectively. James Caves, an agricultural education trainee at Mississippi State College, puts meaning into his discussion of the points to consider in selecting a quality dairy cow. He is teaching a class of second year Vo-Ag boys at Newton, Mississippi. (Photo by W. T. Taylor.)

Who will catch the calf? FFA members of the Wm. A. Broyles Chapter of Park River, N. Dak., and Minto Chapter of Minto, N. Dak., compete in the annual "Calf Scramble" held at the Walsh County Fair and State Potato Show at Park River. There are three boys to each calf who are required to catch and correctly halter their calf within seven minutes' time.



These Austin, Minn., Vo-Ag students are learning to lay concrete blocks as a part of their training in Farm Mechanics. The teacher providing his services for this particular activity is Vince J. Meyers, Agricultural representative for the Portland Cement Association. (Picture furnished by James H. Dice, Vo-Ag Instructor, Austin, Minn.)

