

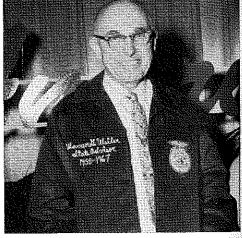
HERBERT BRUCE JR - DEK TEACHER TRAINER AG-ED COLLEGE OF ED U OF KY LEXINGTON KY 40506

One of the features of the 1967 Ohio FFA Convention was this recruitment exhibit. Dwane Sayre, left, teacher of vocational agriculture at Sycamore, Ohio, and a member of the Ohio Recruitment Commission for Agricultural Education, discusses careers in teaching with two Future Farmers. Recruitment of good teachers of vocational agriculture has always been a problem and it appears to continue with us in the next 50 years.

# Stories in Pictures

GILBERT S. GUILER
OHIO STATE UNIVERSITY





Warren Weiler, retired state supervisor of Vocational Agriculture was presented his first FFA jacket at the 1967 Ohio FFA Convention.

The farmer during the next 50 years will need to have a greater knowledge of agricultural mechanics and technology than before. Bobby Anderson, Teacher of vocational agriculture at Racine, Ohio, had 61 farmers enrolled in an agricultural mechanics welding class.



# Agricultural Education

Volume 40

August, 1967

Number 2



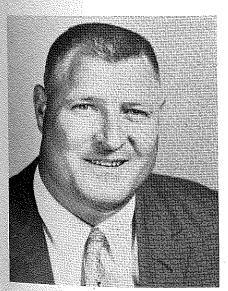
FLOYD JOHNSON
President



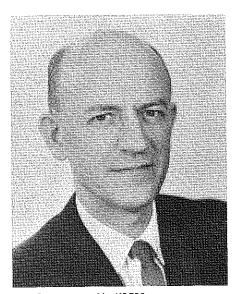
RALPH BENDER Vice President Ag. Division



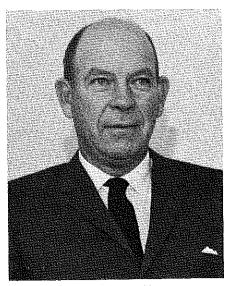
LOWERY DAVIS Secretary Ag. Division



ELVIN WALKER NVATA President



AL KREBS AATEA President



L. C. DALTON NASAE President

Featuring—Our Professional Organizations

# AGricultural EDucation

MAGAZINE

No. 40 August, 1967 No. 2

#### MANAGING EDITORS

CAYGE SCARBOROUGH, Editor, North Carolina State University, Raleigh, 27607. THURSTON FAULKNER, Business Manager, State Department of Education, Montgomery, Alabama, 36104. RALPH WOODIN, Consulting Editor, Ohio State University, Columbus, 43210.

#### SPECIAL EDITORS

REGION I — PHILIP EDGECOMBE, University of Massachusetts, Amherst, 01002.

REGION II — Joe Ball, Cornell University, Ithaca, 14850.

REGION III — William Bingham, University of Kentucky, Lexington, 40508.

REGION IV — George Wiegers, University of Tennessee, Knoxville, 37916.

REGION V — JOHN THOMPSON, University of Wisconsin, Milwaukee, 53706.
REGION VI — RAYMOND AGAN, Kansas State

University, Manhattan, 66502. CARL HUMPHREY, State Department of Education, Jefferson City, Missouri, 65101.

REGION VII - JAMES C. ATHERTON, Louisiana State University,

Baton Rouge, 70804. MAX AMBERSON, State Dept. of Public Instruction, Helena,

Montana, 59601.

REGION VIII — Dwight Kindschy, University of Idaho, Moscow, Idaho, 83843.

REGION IX — E. M. JUERGENSON, University of California, Davis, 95616.

#### AT LARGE

Books - RAYMOND CLARK, Michigan State University, East Lansing, 48823.

NVATA — JAMES WALL, Box 4498, Lincoln. Nebraska, 68504. Pictures - GILBERT GUILER, Ohio State University, Columbus, 43210. Post-Secondary - Howard Sidney, Agricultural and Technical College, Cobleskill, New York, 12043. Research - GEORGE O'KELLEY, University of Georgia, Athens, 30601.

The professional journal of Agricultural Education. A monthly publication managed by an Editorial Board and printed by The Lawhead Press, Athens, Ohio, 45701.

#### EDITING-MANAGING BOARD

DAVID R. McCLAY, Pennsylvania State University, University Park, Chairman; GEORGE HURT, State Department of Education, Austin, Texas, Vice-chairman; RALPH WOODIN, Ohio State University, Columbus, Secretary; T. L. FAULKNER, State Department of Education, Montgomery, Alabama; SAM STENZEL, Russell Kansas; Neville Hunsicker, U. S. Office of Education, Washington, D. C.; R. W. MONTGOMERY, Auburn University, Auburn, Alabama; Gerald Page; Nixa, Missouri; Cayce Scarborough, North Carolina State University, Raleigh; Or-THOMPSON, University of California, Davis; Elvin Walker, Norman Park, Georgia; JAMES WALL, Box 4498, Lincoln, Nebraska.

#### TABLE OF CONTENTS

Editorials
Theory and Practice27
Cayce Scarborough
Letters to the Editor28, 29
National FFA Archives
Our Professional Organization31  Elvin Walker
Themes for the Agrigultural Education Magazine31
Major Problems and Issues in Agricultural Education32 Alfred H. Krebs
NVATA — Some Questions and Answers 34  James Wall, Carl Devin and Gail Wright
Expendable Shop Supplies
Teaching Gun Safety37  Clifford Van Berkum
Teach Safety in Farm Mechanics by Example38 Richard E. Wagoner
The Chartered Bus39  Everett H. Frink
Meeting Needs of Post Secondary Teachers40  Gerald Fuller
Reading Problems in Technical Subjects41  Hildegard Hilton
Let's Cultivate the Seed
Book Reviews
A Pilot Programme in Adult Farmer Education
Stories in Pictures

Subscription price, \$3 per year. Foreign subscriptions \$3.25. Student subscriptions in groups one address, \$1 for October-May. Single copies, 35 cents. In submitting subscriptions designate new or renewal and address including zip code. Send all subscriptions to T. L. Faulkner, Business Manager, AGRICULTURAL EDUCATION MAG-EDUCATIONAL AZINE, State Department of Education, Montgomery, Alabama, 36104. Articles and pictures should be sent to the Editor or to the appropriate Special Editor.

AMERICA Second-class postage paid at Athens, Ohio.

# We Need A Stronger AG Division

There is much concern about the downgrading, if not disappearing, of the leadership in Agricultural Education in the U.S. Office of Education. This concern is shared by everyone to some degree, from the newest teacher to the Chief of Agricultural Education. This has been developing for some time and is now approaching a critical point. There is no doubt about the seriousness of this situation, and that it needs correcting.

However, this tragic situation serves to highlight the need for a better arrangement for all of us to work together more effectively on problems facing our profession. We need to develop our own leadership in our various roles throughout the country, regardless of the leadership in Washington. For many years, this state and regional leadership was expressed through the Regional Conferences in Agricultural Education. As discussed in these columns previously, those conferences were killed. Although partially revived during the past year, they too lack some essentials for effective communication and leadership, especially in matters needing immediate action. Also, it is doubtful if our problems are so regional in nature as we once thought. We must have national action on many of our problems.

What are the opportunities? It is always well to learn what factors "are going for you" when considering action of any consequence. This is more than strategy, it is part of any sound decision-making process. It appears that the Ag Division of AVA might well be the point at which we could concentrate our efforts to work together more effectively. As stated in the special tribute to NV-ATA last year, this organization has proved of great value, not only to teachers but to all of us in Agricultural Education. But the NVATA should not be expected to carry so much of the load. AATEA and NASAE were slow in getting organized, but are gaining in know-how and taking their places as worthwhile professional organizations. However, both of these are handicapped by lack of finances and anyone devoting full time to the organizations and their work. There is already the structure of the Executive Committee of the Ag Division to keep the three organizations working together on common problems. However, again, limited finances, as well as time, prevents this group from meeting often enough to react to current situations needing attention.

Why don't we take action to make this structure really effective as a prolessional representative for Agricultural Education? A little more specific planning with modest financing would do the job. As a beginning for what I hope will be thought and discussion followed by action, I am suggesting here onc possible approach to a more effective professional organization.

Let's strengthen the Ag Division. The first step would be to have a full-time Executive Secretary. This would be the Secretary of the Division. His office should be in Washington in or near the AVA Office. This would be essential for close working relationship with the AVA and the U.S. Office of Education, as well as many other national groups with headquarters in Washington; NEA for example. The major job of the Executive Secretary would be to keep in close touch with all legislative and policy matters affecting Agricultural Education, and communicate directly with leaders of NVATA, AATEA and NASAE. These leaders would respond for their respective organizations or contact all members direct if they wished. In addition, the office of the Executive Secretary could handle the subscriptions and mailing of the AgEd Magazine. The Editor and Business Manager would continue to operate under the Editing-Managing Board as now done. All AVA dues for AgEd Personnel would be handled by the Executive Secretary. NVATA, NASAE and AATEA could collect their own dues prior to sending in to the Executive Secretary if they wished. The Executive Secretary would have an office at AVA Headquarters at the annual AVA Convention to handle all registrations for the convention and functions of the Ag Division.

(Continued on next page)



and Practice

Theory

Cayce Scarborough

The theme for this month is a little different. We are giving special attention to the professional organizations within Agricultural Education. Last year we gave all the space to NVATA. This year we are including AATEA and NASAE too. In spite of the fact that this is supposed to be the day of "The Organization Man," many of us in AgEd are not very active in our own organizations. Must be something wrong somewhere. What

Note the interesting Letters to the Editor this month. There must be many facets to our FFA situation. Note that all writers questioned my views in the FFA Editorial, yet they seemed far apart in their views too. Let's keep the channels of communication open and use all of our best thinking to keep the FFA an important part of our changing programs in vocational agriculture.

Speaking of FFA, one of the new developments is the beginning of the National FFA Archives. Elmer Johnson was kind enough to send me another account of this new project after the first announcement got lost in printing the May issue featuring the FFA. See the short article this month.

Note also the Guest Editorial this month. This too is a little different from most editorials. Some of the memories of Howard Deems are just too good to miss. Someone should capture these and similar experiences of Teachers of Vocational Agriculture through the years and get them published. Not only would this be interesting reading but would serve to document an unusual character among public school teachers for the past 50 years — The Ag Man. Anyone interested? Howard, maybe you are the man to write the book.

(Continued on next page)

AUGUST, 1967

#### Theory and Practice

(Continued from page 27)

Another unusual article is the story by Mrs. Hildegard Hilton, University of Connecticut. If you teachers are concerned about the reading ability of your students you may wish to learn more about her report than is in the short story this month. She will send you the complete report for 50 cents. Requests should be sent to Mrs. Hilton, Edwin O. Smith School, University of Connecticut, Storrs, 06268.

Have you seen the list of farm jobs declared to be hazardous to youth? In addition to setting a 16-year age minimum for employment in certain agricultural operations, the recommendations include some things not among those considered previously. One of these is "handling or caring for a cow with new-born calf." Some interested persons are suggesting that perhaps it would be well to put some qualifying statements in the regulations so that students who have studied and practiced safety while operating a tractor, for example, would be approved for handling this operation though listed as hazardous. Same idea as Driver Education. Is anybody working with anybody on this matter? Looks like it might have real implications for much which has taken place has not involved of the developing work experience in new programs in vocational agriculture.

Concern for more consideration of attitudes of prospective enrollees as part of any educational program dealing with occupational education seems to be gaining in importance. Several studies growing out of some of the "poverty programs" indicate that attitudes are most difficult to change. Some feel that here is the key to any change whether in poverty or among the more affluent. Put another way, this view suggests that no change of any consequence will be made by a person unless the attitude related to the matter is changed. Maybe that is why all of us share in the reticent farmer's remark, "I already know better than I'm doin'."

Did you notice some difference in the appearance of this magazine last month? Our new printers, The Lawhead Press, Athens, Ohio, started with the July issue. This is only the third printer in nearly 40 years of the AgEd Magazine. Started with Meredith

LETTERS TO THE EDITOR

Dear Cayce:

My commendations on a very fine issue on the FFA. Much more light needs to be shed in this area if the FFA is to remain a vital part of our total program of vocational education in agriculture.

That change is needed should not require debate. When a state can have twice as many students enrolled in vocational agriculture as are members of the FFA, the situation is indeed serious.

It may be a mistake, however, to lay responsibility for a lack of change at the doorstep of the present governing structure. Part of the strength of the FFA comes from the continuing strong dedicated contributions of time and energy by adults who believe in the FFA. Needed changes here would be made, along with changes in other aspects of the FFA, if we were able to explore issues regarding the FFA with

Basically, our entire profession has many vital issues regarding the FFA. Unfortunately, the limited debate

to any great extent those persons who work most closely with the FFA and who could contribute the most to determining changes needed and directing the accomplishing of these changes. The closer we are to something, the more likely we are to become defensive and to react emotionally rather than objectively. Thus, we have the determination of change to those we least want to have that responsibility.

Again, congratulations on a fine is sue of the magazine. Debate on FFA issues does not necessarily lead to change. It can lead to a stronger belief in what exists as well as to change. Hopefully, it will result in a stronger

> Sincerely, Alfred H. Krebs Professor

University of Maryland

Thanks Al, for your keen analysis. more objectivity and with less emotion. Some feel that if you raise a question about the FFA that you are "agin hesitated to investigate and debate the FFA". I think that we must keep the channels of communication open for varying views. However, as you indicate, this "ain't easy". CCS

#### We Need A Stronger AG Division

(Continued from page 27)

Many more details would need to be decided upon. I mention those above to indicate the scope of the office of Executive Secretary as it might work. Some rough calculations of finances indicates that such a move would not be exhorbiant if office space is not too expensive. If office space cannot be secured with AVA Headquarters, there would be the possibility of getting office space on a selfliquidating basis by renting space if we could invest in a suite of offices.

It would appear that a much stronger Ag Division would not interfere with the work of the AVA Vice President for Agriculture, nor in any way with the good work already being done by AATEA, NASAE, and NVATA. On the contrary, one objective of the stronger division would be to strengthen the work of the Vice President and the three groups. There may be other groups developing, such as Post Secondary Ag Technology. The stronger Ag Division would serve as an umbrella for all.

What do you think?

Cayce Scarborough

Publishing Company, then with Interstate Printers and Publishers through June 1967. The Editing-Managing Board gave the printing contract to Lawhead Press based upon the quality of work done as well as cost.

Have you taken that vacation with the family? Better hurry. The new school term is just around the corner. Thanks for your letters. See you next

Cayce Scarborough

Dear Editor Scarborough:

The May issue of The Agricultural Education Magazine has been received and read from cover to cover. Your editorial "Model T? Model A? V-8? Thunderbird?" intimates that the FFA has not changed any since it was organized in 1928. Let me remind you that the basic principles of operation of the automobile engine have not changed in that gasoline is used for fuel, it is compressed, exploded by spark, power transmitted through the transmission to two or four wheels and driven by one steering wheel. Yes, the models have changed but not the principle. The primary aim of the FFA is the development of agricultural leadership, cooperation and citizenship, just as sound today as when the FFA was organized. Participation by members; learn to do by doing, is the important phase of the FFA activities. These activities need to be changed from time to time to meet the needs of the members.

Change seems to be the popular word today. We must make changes to make progress, however, it is not necessary to change just to be doing something. The International Teamsters Union has not lost its' strength or today drive teams. Let's keep the name Future Farmers of America since the organization has done so much for so many members during the past 39 years. It can still serve all students in-

The organization is still operated by the members even though adults have been employed to be of service to the members of the organization. As a Directors, with 18 years of Vo-Ag teaching experience, ten years as district supervisor, eight years as state FFA executive secretary and two years as state FFA advisor, I feel that I am in a good position to capably represent the vocational agriculture teachers of West Virginia and throughout the Nation. All other eight members of the National FFA Board of Directors have had vocational agriculture teaching ex- analogy breaks down. I hope that your perience and will do a creditable job in serving in an advisory capacity.

I purchased a new Model T in 1923

for \$413.00, I drove a Model A to the 1946 National FFA Convention, therefore, I am very familiar with the changes that have taken place in the automobile industry as well as in the FFA. I am wholeheartedly in favor of making any change that will benefit a majority of the present and future members, but I am not in favor of many changes that have been suggested to date. Additional consideration should be given to a more equable representation of delegates to the National FFA Convention is one example

that I favor. Keep on publicizing suggested changes in order that vocational agriculture teachers may be informed of the ideas submitted by different individuals.

Sincerely yours, W. H. Wayman State Supervisor West Virginia

Thanks for your interesting letter. By the way some feel that the name of the Teamsters Union is a handicap indicating that they are still in the days of the Draft Horses. CCS

Dear Cayce:

About that automobile you used in the May issue of Agricultural Educaeffectiveness. Yet, how many members tion, isn't the illustration really a good one for not changing the name of the FFA. The fact is that both the Model T and Thunderbird are Fords.

The Thunderbird is no more the same car as the Model T than the FFA terested in an agricultural occupation. of today is the FFA of 1928. (For the record, Model A was introduced in 1928, the same year the FFA was founded.)

We submit that it is no more necesmember of the National FFA Board of sary to change the name of the FFA than it is to change the name Ford. What is important is that the model be up to date; not that the name be changed.

With best wishes, I am Yours sincerely,

W. C. Dudley, Assistant Supervisor Agricultural Education

Appomattox, Virginia

Good point well made, Bill. Any second paragraph describes our situation. Responses from State FFA Secretaries and the studies that I have

seen indicate that changes in the FFA Models have been minor. Some feel that no changes are needed. THANKS! CCS

Dear Dr. Scarborough:

As I sit here on a spring day, with a shower coming down, your questions of what is a supervisor of Agricultural Education comes to my mind. My first thought is of a man who is spread too thin, is responsible for too many jobs. The hours must be long as those of the vocational agriculture teachers which he supervises. The work of the supervisor is one of responsibility with many new challenges each day. I think of a supervisor as a man between many men. First of all he is the link between the state office and all local offices. He must be able to meet the superintendents, principals, and other school officials. The supervisor must present the vocational program to civic clubs, schools, and the general public. Many times he must explain the program to new teachers in vocational agriculture. In addition to this he must provide learning experience for in-service teachers, as well as material to help in teaching. He must also iron out trouble spots as they appear. A supervisor must be a man among men. He should have years of experience in the vocational field he is supervising, and be a family man, with personal responsibility of his own. He should set an example in his community by doing church and civic work, as he should expect of the dedicated teachers who work with him. Am I asking too much? I may be, but this I believe.

Sincerely Jack C. Cole Vo Ag Teacher Marshall, N. C.

Yes, I think so Jack, maybe you should add that he should have wings and a halo! However, your supervisor probably expects about as much of you. Your \$1 has been mailed. Thanks.



# Forty Years Beside A Teachers Desk

HOWARD W. DEEMS



It was early July, 1923. The hot wind from the south had started to curl the leaves of the knee-high corn. With my team headed into the breeze, I started my afternoon rest. I heard the farm bell ring. It wasn't mealtime so I knew mother wanted something. It was a phone call from the Superintendent of Schools at Adams, Nebraska. He wondered if I might be interested in a teaching job in FFA Supply Service and The National the upper grades. I was.

With three years of college, which included four hours in "History of Education" and two hours in "Coaching", I was deemed to be best qualified to act as Principal of the Junior High and basketball coach.

The first six weeks demonstrated the fallacies of their selection system, but it was too late to change.

Today when I walk down the main street of this little country town, I still hear the old-timers whisper, "Oh, yes I remember him." They remember the time I slapped a boy and his left eye poppd out. As I was regaining consciousness, I heard them explain that it was a glass eye and didn't fit very well. They also like to remind me of the time I insisted a ninth grade girl remove her suit jacket when she complained about it being too hot. As she reluctantly started the procedure, I discovered my error. It was definitely part of her dress and should not, as she tried to explain to me, be removed in public. Some folks still insist I originated the "strip-tease" that was rather popuar in the Midwest during the

It is perhaps not necessary to make the statement, but for the record I will state that I stayed at Adams only one year. After the many experiences, I felt additional education was necessary. I returned to the University, took all of the educational courses available and then went back to the classroom.

It was my first year of teaching vo-ag at Lewiston, Nebraska. We had spent several days discussing the selection of farming programs. I tried to challenge the boys by urging them to "think big". Over and over again I told them to always "think big". Back in those days, the vo-ag period was three hours in length. It was during this last hour that I discovered one boy with his book closed, gazing out the window. I went back to his desk and asked him what he was thinking about. His reply - "Elephants."

I smile when I recall the little Junior High miss who was never satisfied with her grades. If I gave her an 85 she would insist that the grade should have been 88. One time she submitted an exceptionally fine paper. I was just ready to put down a grade of 97, when I thought to myself, "Why not give her 100 and save the after-class comments". The next morning I handed out the papers. I smiled as "Miss "Never-Satisfied" approached my desk, expecting she would smile back and go merrily on her way. But no, she stopped and in the same tone of voice as always, said, "I believe I should have had a grade of 110. You see, I answered one question you didn't ask."

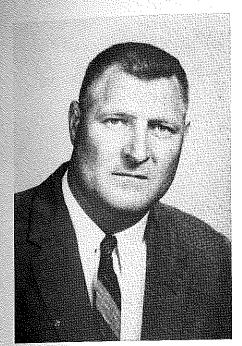
It happened in the late twenties, one lad in my senior class wanted to build for his big shop project, a ditch-digger He started with the bullwheel and a drive-chain from an old binder. All semester he worked, welding and bending iron, figuring different drive arrangements and assembling. At the end of the semester his machine was just a pile of iron in the corner. My grading score card stated: "40 points on completed project." This one was not completed. He almost flunked the course. Years later, a ditch-digging machine was invented containing the same principles the young farm lad in my class was trying to perfect. (Continued on page 46)

# National FFA **Archives Established**

The National FFA Board of Directors at its January meeting made it possible to move ahead with a National FFA Archives. The plan is to set up the Archives at the FFA Center near Mt. Vernon, Virginia where the FFA magazine have their headquarters. Recently a new structure was completed at the Center to provide needed space for the Supply Service which released some footage in the original structure. It is in this released space that the Archives will be housed.

A local Advisory Council for the Archives has been designated by H. N. Hunsicker, the National FFA Advisor, who will serve as the overall administrator of the Archives project. The Superintendent and Manager of the project is E. J. Johnson who has served as an FFA Consultant since his retirement from the U.S. Office of Education. Mr. Johnson developed a nine page tentative outline or plan for the Archives and this plan was reviewed and revised by the Advisory Council at an initial all-day meeting on Wednesday, March 29. Following this meeting the approved procedures for moving ahead with the project are being implemented and given necessary publicity. State staff members, present and past, for Vocational Agriculture to include the FFA will soon be called upon to render needed assistance and particularly in the acquiring of essential Archivial materials. This new project is a real challenge to acquire for preservation and display at one place many items of significant historical interest dating back to 1928 when the FFA was organized in Kansas City, Missouri as an outgrowth of National Judging Contests for Students of Vocational Agriculture conducted at that center. It might be well to look back farther to 1917 when Vocational Agriculture was established on a National basis which brought forth for such students a host of State youth groups, having a similar interest, to culminate in a common organization — The National FFA Organization.

THE AGRICULTURAL EDUCATION MAGAZINE



It is indeed a pleasure to have the opportunity to extend greetings to you, the readers of Agriculture Education Magazine, from our teachers organization. We are deeply indebted to this magazine for helping to promote NV-ATA work. We are happy to have the honor of being a part of this publica-

The primary objective of NVATA is to assume a leading role in the promotion and development of a great program in Agricultural Education. We strive to inform our membership of the opportunities that lie ahead as well as to keep them informed of major issues that are facing us in Education. It is the belief of NVATA that when we have strong local programs in agriculture we in turn will have a strong National program in Agricultural Educaand prepare literature to help unite the efforts of all agriculture teachers in this nation so that our philosophy will be harmonious.

One problem facing us today is the shortage of students entering the agricultural education field. A recent survey shows that practically every state is faced with a shortage of agriculture teachers. We have a committee working in this area and we feel that much good is being done to solve this problem. Another problem in agricultural education is the ever changing demands upon us as teachers. We are constantly working to keep our cur-

modern agriculture.

The AVA meetings in December will feature many speakers that have suggestions for helping all teachers do a better job. The various topics that will be discussed at the NVATA convention will center around the theme, "UP-GRADING OUR LOCAL PRO-GRAMS IN AGRICULTURAL EDUCATION."

The future has never been as bright as it is today if we as teachers will accept the change and develop our programs with this in mind. It appears that change is the one thing that is certain and we can accept this fact and move forward or else we can cling to the old and be left behind.

I am certain that NVATA will accept the challenge and be providing

riculum in line with the needs of leadership for a great organization for many years to come,

> Elvin Walker President NVATA



Richard Mudge, charter member of the Tonica, Illinois, FFA Chapter poses proudly with daughter Barbara chosen as the 1967 Tonica FFA Queen. Adviser G. I. Irvine wonders if this has happened in any other FFA

#### THEMES FOR THE AGRICULTURAL EDUCATION MAGAZINE

OCTOBER-DECEMBER, 1967 Volume 40

October — INNOVATIVE PROGRAMS

(Local Vo Ag Cooperative Programs)

November — OCCUPATIONAL EXPERIENCE (In All Areas of Agricultural Education)

December — TEACHER PREPARATION AND CERTIFICATION

(Requirements by states, B.S., M.S.; trends)

#### A LOOK AHEAD

- GRADUATE STUDY AND IN-SERVICE EDUCATION January (Assistantships available; Summer institutes and training programs; in-service education for teachers)

tion. Our aims are to make suggestions, February — TECHNICAL EDUCATION IN AGRICULTURE (Post-secondary programs)

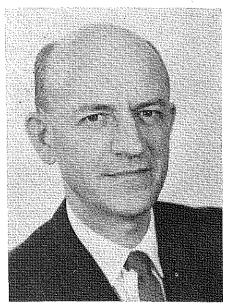
> - RESEARCH AND DEVELOPMENT March (Studies completed and in progress; implications of research for

the development of local programs) — THE IMAGE OF

VOCATIONAL EDUCATION IN AGRICULTURE (Perceptions of others concerning education for agricultural occupations; Our perceptions of occupational education in agriculture)

— INSTRUCTIONAL MATERIALS (New materials; Materials needed; Effectiveness of instructional materials)

— EVALUATION June (Evaluating local programs; State and National evaluation)



Alfred H. Krebs

The major problems and issues facing agricultural education remain about the same from year to year. Only the answers change. The advent of the Vocational Education Act of 1963 did not really change the problems and issues but it did create a new sense of urgency for dealing with these issues. I am presenting my list of items as either issues or problems. The two lists could undoubtedly be fused.

#### Issues

- 1. To what extent should generalists be appointed to leadership positions in vocational education? Many persons believe we have already gone too far in this direction. Perhaps the issue should be defined in terms of the administrative organization and staffing policies at all levels—local, state and national. No simple answer can be given. Neither the value of a fresh point of view nor the value of education and experience in a field should be ignored. Experience in a field does not necessarily lead to unwillingness to accept and encourage change anymore than does a lack of vocational field experience indicate an inability to contribute to vocational education.
- 2. Should the reporting of a specific, narrow occupational objective be required for students enrolled in vocational programs? Many questions need consideration in order to find a position regarding this issue. Is the require-

\*This was in response to the Editor's request to the president for a statement on issues & problems and what the AATEA was doing about them.

# MAJOR PROBLEMS AND ISSUES IN AGRICULTURAL EDUCATION\*

ment consistent with the educational needs of youth? Is the requirement consistent with what is known about the making of vocational choices? Is the requirement consistent with the need to maintain a flexibility of choice for the individual both in terms of educational planning and vocational planning? Becoming too rigid in requiring the naming of a specific occupational choice by a high school freshman, and using this later as a basis for program evaluation, seems to be unsound educational planning. Pergrade level as which vocational education should be provided. Some vocational programs lend themselves to an earlier start than others. To the extent possible, vocational education needs to be started before the student becomes a dropout, not after he has become a failure in the world of work. This early vocational education should require no more than an identification with a broad occupational field.

- 3. Should vocational education be provided in area vocational schools or as a part of comprehensive high schools? The present trend appears to be toward having vocational education as a part of the comprehensive high school, although many examples of area vocational schools can be found. The solution probably lies in providing in the comprehensive high school all vocational education for which there is sufficient demand. Other vocational programs would be provided on an area basis.
- 4. Should vocational education programs be based on local and area studies or on state and national studies of jobs and job opportunities? More and more concern is being expressed regarding the community study basis for planning vocational education programs because of an increasingly mobile population. The question is whether a

sufficiently broad program of vocational preparation will be provided when planning is based on small area data. An important related question is whether students' interest can be maintained if programs are based too much on a "where you might move to" kind of planning. The students being the least well served by vocational education are those who are also least likely to accept and strive for long-time goals based on world of work data outside the limits of what they can see in their own home area. The issue may be haps the issue is really that of the spurious to some degree since the data would be overlapping whether collected on small areas or a large area basis. In addition, sound planning would mean using state and national data as well as local data.

#### Problems

- 1. What should the program of teacher preparation be in order to prepare young men for the challenge of planning and conducting the kind of vocational agriculture program now
- 2. How can we encourage enough young people to study agriculture at all levels to staff the jobs and positions for which knowledge and skills in agriculture subjects are essential?
- 3. What should the vocational agriculture curriculum in the broadest sense of the word be in the future? We are being forced to modify a program which has been as successful as any ever devised. How can we preserve the essential characteristics of that program while adjusting to the pressures of the times?
- 4. What should be the nature of graduate programs for teachers of agriculture? How much emphasis should be given to research, to method ology, and to technical content in agri-

- 5. What should be the nature and organization of inservice education programs for teachers? What kinds of aids should be provided?
- 6. What should be the role of the FFA in the future? Can it become an "integral" part of the educational program for all students enrolled in vocational agriculture in the future? The FFA may well be the major unifying force for the increasing variety of vocational agriculture programs.
- 7. What is the place of agricultural education in the program of general education for all youth?
- 8. What are the best arrangements for coordination of vocational education programs with each other and with general education?
- 9. What should be the role of agricultural education in providing programs for the disadvantaged?
- 10. What kind of planning and research can agricultural educators do to help provide answers to the growing list of questions concerning the everchanging role of agricultural education in our ever-changing world?
- 11. How can leadership for agricultural education be prepared for the emerging programs in agricultural education?

There are many other problems and issues. Which problems and which issues are major and which are minor depends on one's point of view.

#### Position and Activity of AATEA on These Issues

It is impossible to state the position of AATEA on all of these issues. I can mention a few of the major things the organization is doing about them in addition to the usual participation in the AVA Convention and U.S. Department of Health, Education, and Welfare Regional meetings, both of which are valuable.

the preparation of a book on teacher education in agriculture. This should be in print sometime this year and deals with some of the issues listed.

A second AATEA activity is the joint sponsorship, with the National Association of Supervisors of Agricultural Education, of regional seminars and research conferences which deal with these issues.

AATEA is also supporting the activity of the Associated Organizations for Teacher Education through the AVA Council on Teacher Education.

Another activity being considered is the publication, by AATEA, of a series of monographs on various issues in agricultural education. We are just now beginning the process of identifying specific issues as a basis for deciding where to start.

Other activities, particularly of a leadership development nature, are needed. AATEA, however, is a relatively youthful organization. Much more can be expected of it in the years

#### The AVA Convention Program

You also asked about the AVA Convention Program, Conventioneers can expect a program dealing with many of the issues and problems listed earlier. Every effort is being made by our very able Program Chairman, R. Woodin of Ohio State, to plan programs which will aim at the heart of the problems and developments in agricultural education. Program participants are being selected on the basis of their courage and willingness to speak out forcefully and clearly. The accent will be on a changing agriculture and a changing, dynamic program of vocational education in agriculture.

#### Coordinating Efforts in the Agricultural Division of the AVA

Your last question related to co-One AATEA activity in process is ordinating efforts within the Agricul-

tural Division of the AVA. In all fairness, I must say that there has been excellent coordination of activities under the leadership of Floyd Johnson who is now President of the AVA. The Agricultural Division Executive Committee has been receptive to new ideas for the development and improvement of agricultural education generally. The representatives of the organizations on the Executive Committee have worked out acceptable solutions to problems of mutual concern. There appears to be a general recognition of the fact that our strength lies in working together toward common goals.

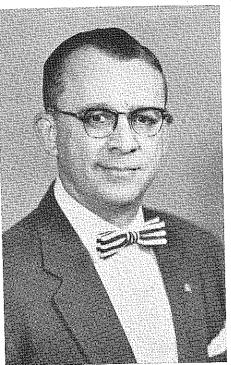
The joint sponsorship of meetings on agricultural education by AATEA and NASAE represents a step forward in coordinating activities within the framework of the AVA. Perhaps the role of the NVATA in relation to these meetings should be studied. AATEA is planning the publication of monographs on issues in agricultural education. It may well be that NASAE and NVATA would also be interested in this kind of activity.

The NVATA has taken on the burden of providing manpower for much AVA program activity. Teacher educators and supervisors work closely with NVATA in publishing The Agricultural Education Magazine. NVATA, NASAE and AATEA memberships on AVA committees give evidence of a continuing coordinated attack on common problems.

Certainly, there is much more that needs to be done. At the present time, however, the problem seems to be one of identifying activities to work on cooperatively—rather than a problem of coordination of efforts within the Agricultural Division of the AVA.

Sincerely,

Alfred H. Krebs President AATEA



## **NVATA** Objectives

JAMES WALL Executive Secretary, NVATA

The NVATA is an affiliation of associations of teachers who are actually engaged in Vocational Agricultural Education. Active membership is limited to those employed as teachers of vocational agriculture on at least a one-half time basis and who are members of affiliated State Associations of Agriculture Teachers.

The primary objects of the associa-

To assume and maintain an active national leadership in the promotion and furtherance of agricultural education.

To bring together all vocational agricultural teachers through membership in a national organization devoted exclusively to their interests.

To provide an opportunity for agricultural teachers to discuss all problems affecting agricultural education on a national level.

To serve state or local organizations of agricultural teachers in the solution of any problems which may arise.

The NVATA was organized in 1948 and has enjoyed a continual growth both in membership and in the scope of its' activities. The fact that over 92% of those eligible for membership have joined the organization is of con-

siderable significance. How many other national organizations can claim such a record? Certain developments indicate that the 1967-68 figure could run as high as 98% of the potential.

The NVATA is recognized by business, by industry, by government, and by many others as the leading organization in the field of agricultural education. Some of the NVATA goals are to -

- 1. Continue working for the welfare of the teachers of vocational agriculture, higher standards of instruction and the advancement of the profession.
- 2. Have a complete program of instruction for high school boys, young farmers and adult farmers in all schools offering vocational agricultural education.
- 3. Have every teacher of vocational agriculture as an active member of his state and national professional organizations.
- 4. Continue representing teachers of vocational agriculture in developing an even closer working relationship with business, industry, government and other groups and organizations interested in agriculture.
- 5. Continue the development and implementation of a sound public relations program that will inform the public about vocational agriculture.
- 6. Assist and encourage members to improve themselves professionally.
- 7. Keep the membership properly informed in regard to developments affecting vocational agricultural education.
- 8. Have the membership, through proper channels, indicate ways and means by which the organization can better attain its objectives and be of greater service to the profession.

The NVATA has enjoyed a close working relationship with the American Vocational Association in promoting all areas of Vocational Education.

It is pleasing to note that both the state supervisors of Agricultural Education and the teacher educators have formed national organizations in recent years. The NVATA works closely with both of these fine organizations. The three organizations working together as the Agricultural Division of the AVA indeed gives Vocational Agricultural Education a strong voice.

# N.V.A.T.A. — Why A Professional Organization?

by

CARL G. DEVIN

Dean, Vocational-Technical Division Treasure Valley Community College Ontario, Oregon

Each summer conference, convention, or workshop when vocational educators, especially vocational agricultural teachers, meet one can hear "rumblings" concerning the question, "Why do we have to pay association dues to this organization or that organization?" Other questions arise as to, "Why should we even have an organization?" or "Why don't they spruce up this organization and make it a real professional organization?"

The main question is, "Why have a professional organization like the National Vocational Agriculture Teacher's Association, and why is it a professional organization?" To answer this, one must determine "What is a professional organization?" and "Which should come first - a professional organization or the professor?" In many occupations, such as Medicine, the group has evolved through the centuries to develop into a professionalized occupation. Out of this professionalism has then grown an organization - The American Medical Association, Education, particularly vocational education, is not necessarily developed in this way. Education in the early centuries was for the elite that could afford to go beyond the first few grade levels of learning, but still was not considered a professional position as the doctors and others. Vocational education is equally as old, but was generally by father-son appenticeship method of teaching the particular trade. In 1917, with the Smith-Hughes Act, agricultural education was first born on an organized basis. Many vocational agriculture teachers belong to such organizations as their state education association and to the National Education Association, but this does not fulfill their specialized needs for an organization to serve those teachers of agriculture. It was not until after World War II that groups of instructors banded together to form the National Vocational Agriculture Teacher's Association, and adopted their conWhy?

The question as to "Why have an agricultural education profession?" can best be answered by the first sentence in the N.V.A.T.A. creed, 'I am a teacher of vocational agriculture by choice, and not by chance." It is difficult for many of us to realize that only in the United States and a few other countries throughout the world that we have this tremendous freedom of opportunity. We have the choice as to be an agriculture teacher, a ditch digger, or a doctor. We have chosen to make agricultural teaching a profession by ourselves. Out of this profession, we have also chosen to develop an organization which supports and strengthens the profession itself.

The payment of dues is actually a privilege allowing a person to belong to a professional organization and having it represent them. The individual in turn must represent the profession. The dues themselves, though many times we complain that they're too high, are used to carry on the business of the organization and to improve it

professionally. To answer the question, "What does the profession do for me?" We should ask, "what can I do for the profession?" Thus we could borrow a phrase from our late President Kennedy, "Ask not what your country can do for you, but what you can do for your country." However, one only has to read the National Vocational Agriculture Teacher's Association Bulletin to suddenly realize the tremendous impact that N.V.A.T.A. gives to the nation and the voice it has for each individual member. In addition, one must also consider the fact that our goals in an organization are never completely accomplished, but it is up to each and every member to continually strive toward reaching the ultimate goal.

Accomplishments

Perhaps the two most important things that N.V.A.T.A. has done for its members would be, "Developed, promoted, and supported activities designed to maintain and improve the standard for vocational agricultural education, and to advance the welfare of teachers of vocational agriculture; and, brought added recognition and respect to vocational agricultural education by establishing working relationships with business, industry, government, and many civic, professional, and other organizations." In addition, the

personal self-satisfaction one receives from belonging to N.V.A.T.A. is very rewarding. For example, the association one has through group meetings with fellow teachers in agriculture. The leadership opportunities in the organization by working on committees and striving to improve the profession for all of those in it. A third is the travel and national meetings when one develops more and more leadership ability as he continues his teaching profession and working in his organization.

Summary

To summarize, one needs to think of a professional organization as the key to improving his profession regardless of whether it is being a man in medicine or in education. Educators as a whole, however, do have a challenge to follow in the footsteps of other professional groups, in that they will need to develop new means of "policing" their own ranks in up-grading the profession in order that outside persons are not called on to do this for them. It is realized that this will take time and courage, but the time lapse can be drastically shortened and courage bolstered by each member of this organization, as well as, each agricultural teacher throughout the United States doing his utmost toward reaching that goal. Once again, it should be stated that being in a professional organization is a very privileged right which we must safeguard within the United States and must promote throughout the free world.

## ABOUT THOSE DUES —

GAIL WRIGHT Vo Ag Instructor Laramie, Wyoming

When we are approached for dues to any organization, our usual attitude each year is to think, "What do I get for my dues"?

In place of this worn-out question, how about substituting the following thoughts next time you are approached?

Are my ideas and opinions from my community being presented to local and state officers?

Do state officers and committee chairmen have a chance to present this information to regional and national officers?

ships with business, industry, government, and many civic, professional, and other organizations." In addition, the meetings often enough to bring back

national thinking and perk up my thinking?

Does every state have an opportunity to help formulate our national Vo. Ag. philosophy?

Does our national secretary have the staff and equipment to spread our thinking to others and supply us with current information?

Are we being represented at policy-making meetings of other rural organizations?

In one nationwide NVATA program of work better for us than 50 individual state programs or 10,000 local programs?

Is Washington always aware of the thinking of vocational agriculture when national legislation is being considered?

Is the national FFA organization always aware of our thinking as a group, or are a few random letters representing 10,000 of us?

Are the news letters from the NVA-TA officers to our state officers and committeemen enough to coordinate our total program?

Have we increased our dues enough to just hold what we have, or has our dues dollar shrunk along with our other dollars?

Has our public relations program been broad enough to tell the whole story for us on a national, regional and state basis?

Has industry and manufacturing been told our side of the story and have we sat in with them when longrange thinking took place?

Do we have sufficient award programs to encourage all of our teachers in all our states and communities?

Are enough national and state studies being made to find the logical answers to our problems?

Are the teaching aids and materials being developed in cooperation with other groups satisfactory and sufficient in quantity?

Are we tying our officers' hands by pulling the pursestring too tight?

Are our young members being trained to take over the leadership of our organization at every level, or is another delegate too expensive to send with the old heads?

Am I paying enough dues to initiate and follow up on the ideas and plans that are important for me and my organization each year?

stitution in December of 1948.

# EXPENDABLE SHOP SUPPLIES

Associate Professor, Agricultural Engineering University of Minnesota

Supply Ordering

sponsibility for coordinating orders,

placing orders, receiving, storing, and

dispensing the supplies. In larger

schools part of these duties will be as-

sumed by the purchasing agent. A

nine-months teacher could be hired an

extra week or two to complete these

duties and to help maintain and repair

all the shop equipment. The sale of

supplies would not necessarily be ex-

pected to finance the labor involved.

The school district should assume this

responsibility as a means to provide a

Sales Records

Students constructing required proj-

ects will determine the cost and all of

these supplies will be available. Each

student with an approved project

should submit a plan and bill-of-

material to his parents and to the in-

structor for approval. Cost of items

purchased can be recorded in one of

two columns; school and other. Stor-

age bins, drawers, cans, bottles, racks,

11111

11111

better educational program.

To order or not to order should not be the question — instead, what and how much???

chase is a task and often a problem; a yearly order. These requests can be however, it is a necessity unless the school is willing to have students making trips to the local hardware or lumber yard during school hours or to have students idle because they do not have the items necessary for project con-

It is agreed that if effective and efficient teaching is to be done in the shop during project construction, there must be organization of the supplies (teaching aids). These supplies are as essential to the shop teacher as frogs to the biology teacher, sheet music to the band director and beakers to the chemistry teacher.

#### Projects Construction

Required projects as the eye bolt, chisel, tool carrier, sawhorse, etc., will be used as teaching devices by some teachers whereas approved projects as loading chutes, wagon boxes, gates, tool carriers, etc., will be used by other teachers. Use the type of project best for your program, community and student needs is the best recommendation; but any method selected will require supplies.

List the supplies needed for the required projects, a selection of items most frequently needed for teaching demonstrations and other construction emergencies. It is not practical in many cases to purchase odd lots of supplies. Buy an entire gross of screws, entire length of steel, entire sheet of metal, plywood, etc., and obtain better prices.

#### Cost Determination

Prepare a cost calculation and request the administration to provide a rotating budget for these consumable supplies. One hundred percent of the supplies cost will not be recoverable because of teaching demonstrations, school repairs and projects constructed for the department.

and similar storage must be organized so that all students can quickly find When a school has several shops:

the items. A cost sheet with current Vo Ag, Industrial Arts, Metal Shop, prices must be posted. Develop a selec-Providing supplies for student pur- etc., all the instructors should submit tion of items and an immediate posting of purchases habit because if not. combined and ordered in June to obmore losses can be contributed to fortain better quantity prices and insure getfulness than dishonesty. delivery for September classes. One shop teacher should be assigned the re-

#### Cash Collections

Schools may have students pay as projects are constructed. A laboratory fee paid when school starts could cover construction costs of a specific number of required projects.

A more successful method is for the student to purchase a shop supply card as illustrated below.

The card costs \$5.00 and the teacher punches the card as all supplies for required or approved projects are purchased from the school. Teaching programs are often altered to fit time schedules, student interest and ability; therefore, the above card is very practical. The card eliminates the problem of the teacher handling money.

Students who carelessly break and damage tools will become more considerate if the teacher takes a punch or two at the ticket to replace the broken and damaged items as saw blades, wrenches, etc.

(Continued on next page)

10 10 SHOP SUPPLY CARD 25 Franklin Public Schools Franklin, Minnesota Value \$5.00

## **Teaching Gun Safety** Has A Place

CLIFFORD VAN BERKUM

Vo Ag Instructor Swea City, Iowa

Spending some time on gun safety in the FFA Safety Program is worthwhile. Young people must understand that hunting is among the most hazardous of sports. As with many other pleasures there are some risks involved. Not only are accidents common during hunting season, but many gun accidents do occur during the off sea-

Carelessness in the handling of firearms is probably the greatest cause of death and injury. In some states, young people getting their first hunting license must pass a written gun safety test. In all states, there are qualified NRA gun safety instructors to assist in your FFA meetings. The conservation officers will be more than happy to talk with the boys if he has the available time. This is a good time to impress upon the boys that the conservation officer is a friend to the safe and law abiding hunter and not a person lurking behind some cover.

#### **Expendable Shop Supplies**

(Continued from page 36)

Income from sale of Shop Supply Cards can be used to purchase replacement items and new supplies as the result of changes in the teaching program. An organized teaching program will be able to define the most critical items for purchase.

The school should not try to duplicate the local hardware and lumber yard because of storage facilities and cash outlay.

The best teacher, physical plant, tools, equipment, plans and lesson plans have been defeated if the school does not provide the finances for purchase of shop supplies, efficient storage and distribution of supplies to students with a dependable cost collecting

Do not let shop supplies become the weak link in your shop educational

#### Teaching Materials

An abundance of reference material is available from most of the ammunition and fire arm manufacturers. By writing to the National Rifle Association, 1600 Rhode Island Avenue, N.W., Washington, D.C., 20036, you can receive many resources if you tell them how you wish to use these materials.

There are many good films available through the NRA and the State Conservation Commission on this subject. Student interest is high on this topic since most farm boys are interested in guns and wildlife. If you are fortunate enough to have a gun club or trap shoot in your community, contact the club officers about shooting demonstrations and practices. Some clubs have a good educational policy and invite the boys to shoot free for an evening. Some FFA Chapters have received so much enthusiasm over trap shooting that they have entered a team in the summer

#### Some Precautions

Shooting can be fun when the boys are taught the proper fundamentals on how to handle their guns, both at home and afield; and how to conduct themselves both physically and mentally when they are handling fire arms. As in most sports, a boy that is enjoying this form of wholesome recreation safely, won't be getting into trouble.

There should also be some time spent on wildlife conservation. Much joy.

time is spent on most of the other natural resources of our area, but very little is said about wildlife conservation. Each year more waste land is being put back into production. Some chapters have been doing good community service projects in wildlife conservation such as planting wildlife covers, raising pheasants or ducks for local conservation clubs or leagues to be released in the local areas, helping the local conservation officers making wildlife surveys, helping the area commission set up nests for ducks, and helping fix and build up State and National refuges. There are many other things a chapter could do if you only ask the conservation officer in

Teaching gun safety is only a part of the program and perhaps it is only the beginning. Actually using the gun and ammunition may not be the vo-ag teacher's responsibility. And because of the great responsibility, chapter hunts as a group may not be feasible. By using the gun at the trap shoot with interested and qualified adults to either assist the instructor or teach the boys eliminates some of these problems. A father-son shoot after an FFA meeting works out well. It is also a time to educate dad on some of the safe practices of gun usage. And finally by teaching good conservation practices, will make shooting a long lasting sport that the next generation can also en-

#### IMPORTANT NOTICE

All subscription orders for the AGRICULTURAL EDUCA-TION MAGAZINE should now be mailed to:

T. L. Faulkner, Business Manager AGRICULTURAL EDUCATION MAGAZINE State Department of Education Montgomery, Alabama 36104

For groups, list all subscribers in alphabetical order, giving the proper mailing address and zip code for each. Make checks payable to AGRICULTURAL EDUCATION MAGAZINE. Thanks!

The Editor

Page 37

All vocational agriculture teachers agree that students learn best by experience. They must also agree that learning by example is learning by experience. Do instructors teach safety by example and demonstration in their farm mechanics programs? What safety practices should be taught in classes in farm mechanics? Do teachers believe in safety by words or by deeds?

#### **STEPS**

Some steps one can follow to teach safety in farm mechanics are as follows:

- 1. Color Code the school shop.
- 2. Provide safety goggles for all stu-
- 3. Keep safety devices and guards on all power tools.
- 4. Teach safety units for all farm mechanics areas.
- 5. Require all students to pass a safety test before allowing them
- to operate shop equipment. 6. Practice the safety rules yourself.

Plugging a 220 A.C. welder into an outlet for a three phase D.C. welder can be prevented by using a color code in the shop, Such a color system can also make controls and guards more visible. One color code instructors can use is the code for agriculture, approved in October, 1960, by the Farm Conference of the National Safety Council. This code uses red to denote fire protection equipment, orange to designate guards, green for safety, yellow for caution, and blue for defective equipment, or out of order tags. This code can be adapted to specific uses.

#### **Eye Protection**

In some states, as in Iowa, students are required by law to wear eye protection while in farm mechanics shops. Even a law will not make all students wear eye protection all the time. Some students do not use safety goggles because they are not practical. Can the students see through the goggles or are they cloudy and scratched? Are goggles provided for all students and stored in an accessible location? Are the goggles used comfortable? Correction of such small problems can encourage better use of eye protection devices.

#### Must Use Safety Devices

Even though safety devices will not prevent all accidents, proper use of these devices will help to eliminate hazards. Guards should be kept on all power tools. The manufacturer has provided guards for certain power

## TEACH SAFETY IN FARM MECHANICS BY EXAMPLE

RICHARD E. WAGONER, Vo Ag Instructor Rock Rapids, Iowa

tools because the guard will make safer conditions for the operator. Instructors must keep these guards in good repair and on the machine. Sometimes they must provide their own guard for safety. Building some wood grills upon which students stand while welding can prevent electrical shock. Small, crowded shops may call for the building of removable screens for welding tables. These screens can cut down on the arc flashes which are hazards for those not welding. Gloves are also considered safety guards. Students are likely to go without gloves rather than use stiff leather gloves that won't bend. This can happen when these gloves are used to handle hot metal over a period of time. Replacing these gloves will prevent burns.

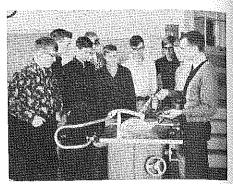
#### Summary and Test

Teaching safety units for all areas in farm mechanics is important in insuring safe use of tools. Instructors should begin in the class room with a study of the specific tool and definite safety rules. The students should then be taken to the shop for a demonstration of the proper use of the tool and showing of dangerous areas. These studies should be followed with a simple yet comprehensive test. A required percent should be set for the passing of the test. A student should meet this percent before he can operate the specific tool. The following is an example of such a test.

Test Covering the Radial Arm Saw and the Table Saw

(Student must score 80% before being allowed to operate either saw.) Mark T for True and F for False

- To make accurate cuts with a circular saw, it is necessary to remove the guard.
- \_\_\_\_ 2. The operator should always use the mitre gauge or the ripping fence and not saw free hand.
- \_\_\_\_\_ 3. The blade should project as far as possible through the work being cut in order



Teaching is teaching. He must also prac-tice what he teaches. Richard Wagoner, Rock Rapids, lowa, is the teacher.

to lessen the danger of kick back.

- 4. A push stick should always be used by the person helping you rip long boards on the circular saw.
- 5. It is safer to remove the ripping fence from the saw (entirely) when cross-cutting is being done.
- \_\_\_\_ 6. Scraps should not be removed from the area near the saw blade with fingers until the saw has come to a dead stop.
- \_ 7. It is not a safe practice to stop the blade from coasting with a piece of scrap lumber after the motor has been turned off.
- 8. A helper used in ripping long boards should support and pull the board being cut.
- 9. You should stand directly in line with the blade when ripping so you can see to follow the line on the work accurately.
- 10. Which of the following is correct for ripping with a radial arm saw?

(Continued on next page)

- 11. It is safe to visit with someone while sawing with the radial arm or table saw.
- 12. It is not safe to stand on the right side of the saw and pull the saw with the right
- 13. Check all locks before turning the switch on.
- 14. There is no danger in leaving the saw at the outer end of the arm.
- 15. Move the square or hammer to the right side of the table when sawing.

Small children watch very closely while older folks perform a task. High school boys also watch their instructor in his practice of shop safety. Does the instructor wear his goggles? Does he demonstrate welding without gloves? When cutting with the table saw, does the instructor leave the guard off and expect the students to always leave the guard on while sawing? Instructors must practice the safety rules in the farm mechanics shop. Practicing safety, while instructing, can be a very effective teaching device.

#### SALESMANSHIP IS THE KEY

JOE COUPLAND, Principal, Morgan County High School Hartselle, Alabama

Many schools have an overflow enrollment in vocational programs such as agriculture and home economics while others experience difficulty in maintaining a minimum enrollment. It is the contention of this writer that in many, even a majority of these cases of diminishing enrollment—it is the lack of familiarity with the program that causes students not to enroll. Very few schools have so few pupils that there does not exist in that school an enrollment potential great enough to justify existing vocational programs.

As a teacher of Vocational Agriculture, and as a school administrator, this writer has been distressed at the attitude and attention paid to selling the program of vocational education in some high schools.

If teen-age boys and girls are to choose your program in preference to some other program, it must have at least the following two characteristics.

1. It must appear to them to be

an attractive outlet for their interest and energies.

2. It must prove to be worthwhile in their estimation.

When you stand before the 8th grade at pre-registration — you must sell them on your program. This is your last chance to appeal to an everelusive imagination belonging to that youngster whom you know could benefit by your program and therefore should be enrolled.

#### Selling Is Your Job

To sell students on the idea of enrolling is as much your job as a vocational teacher as is meeting your class on Monday morning. To abdicate this responsibility is to shirk your duty and to put the work which you should rightly do on the school administration or guidance department neither of which is quite fitted to do the job as well as you could.

Your reply - "I do not know the students in the lower grades." It is your responsibility to know these people. It is upon them and your job of selling them your program that your reputation as a teacher depends. You must make them want to enroll,

It is commonly understood in the business world that if you are to repeatedly sell a product, it must be attractive and worthwhile, that is, it must fill a need. It is on this premise that the second characteristic above was listed and it is here that you begin to sell your program.

#### Best Opportunity

Make the program that you carry out one of the best. It must be well planned in order to be interesting and worthwhile. Vocational teachers have the best opportunity of teachers in any area to do this since their programs are based on areas in which student interest exists.

After you have evolved a program or a product that is worthwhile, and attractive, by the standards of those now enrolled, you must be able to sell new students on your program. This may be accomplished in numerous a minimum of effort, but the plan

A few which have been successfully used by this writer are school assembly programs, orientation days, big brother days, publicity of class and club activitics, and visits to feeder schools and lower grades by teacher or club officers for conferences with 8th grade stu-

It is the belief of this writer that if we do a good job of teaching and a good job of selling this teaching to our clientele-the student-then we won't lose many departments because of low enrollment.

#### The Chartered Bus A Part Of Vo Ag

EVERETT H. FRINK Vo Ag Instructor New Hampton, Iowa

The chartered bus has come into its own and vocational agriculture teachers are helping this come about. The days are gone when the vocational agriculture teacher uses a schoolbus, with its hard seats and many responsibilities, to visit points of interest at a distance. Auto trips in groups are most difficult to arrange and to supervise.

The chartered bus is safe, no work, soft seats, and air-conditioned (if you wish to pay more), the driver must find a parking place, and he lets you off right at the point of interest. The driver never seems to need sleep and is right where you want him if you have planned well enough.

Adult farmer and FFA trips by bus are most rewarding, but they still do not operate themselves. The instructor and his group must still determine the objectives of the trip and how the bus can best serve these objectives. The general area of visit must be determined for maximum use of time.

Who is eligible to go? When will we leave and return? Parents of students and those on the trip like to know as closely as possible what the schedule is. How much will it cost? Can we see vocational agriculture students and teachers on the trip that will help? Will commercial companies help us plan and get the most out of the trip? How about housing and food? Rest stops? And will our schedule be realistic and not impose too much on those we wish to visit?

All of this can be worked out with must be made way ahead of time to make the trip accomplish the purposes set up. Foul ups are most discouraging.

A travel agency, sometimes operated by the bus company, can be used in some instances at no cost.

We here in New Hampton find the chartered bus the way to take a successful, longer tour.

# Meeting the Needs of Post-Secondary Teachers

G. R. Fuller, Teacher Education University of Illinois

Agricultural education received a mandate in 1963 to provide post-secondary programs of vocational and technical education in agriculture. History shows that up to now teacher education in agriculture traditionally has focused upon the preparation and improvement of high school teachers. Teacher education in agriculture must effectively adjust to this new situation or lose by default the responsibility for preparatory and in-service education of these post-secondary teachers.

Evidence exists which indicates that emerging post-secondary programs of vocational and technical education in agriculture possess characteristics different from those found in high school programs. The fact suggests preservice and in-service teacher education programs should be adjusted to reflect these emerging characteristics. The mandate to provide post-secondary education plus the existence of unique characteristics should be sufficient to provide the stimulus for the initiation of appropriate adjustments.

#### Differences

The following examples point out several differences between post-secondary and high school programs. The characteristics of these differences are such that high school oriented teacher education will most likely fail to adequately meet the needs of postsecondary teachers.

Image. The staff of post-secondary institutions have problems and concerns enough different from high school teachers that they feel a need for homogeneous grouping. Post-secondary institutions tend to be associated with a level of instruction higher than that of the secondary school. This situation will strengthen as the post-secondary movement grows. To attract these teachers, teacher education will need to offer some pre-service and in-service education specifically focused upon the post-secondary programs.

Staff. The relatively homogeneous background of preparation in teacher education common to high school programs does not now exist in post-secondary programs. Post-secondary institutions tend to hire personnel who possess competencies in a specialized

agricultural subject-matter area. Presently, these personnel may be either graduates from traditional agricultural education programs, college graduates from programs in technical agriculture or men and women who have gained their education in business and industry. Innovations in pre-service education are needed. In-service education which is merely an extension of existing pre-service education will not meet all the needs of present post-secondary institutions.

Teaching. Teaching in post-secondary institutions is being conducted in a climate different than that of the high school. Instruction is provided in specialized subject-matter areas within institutions offering baccalaureate level instruction. Several different teachers may be responsible for the instruction in a given agricultural curriculum. The subject-matter oriented division within the agricultural programs, plus the baccalaureate focus of the institutions could lead to a shift from occupationally oriented teaching to baccalaureate oriented teaching. Post-secondary teachers need assistance in adjusting to this situation.

Experience programs. The emerging pattern of supervised work-education programs at the post-secondary level often differs in intensity from the traditional high school programs. They resemble intensive field laboratory experiences. Students gain supervised work-education experience in business and industry in large blocks of time. The post-secondary teaching staff does not have daily contact with students as is typical in high school programs. Effective selection of training stations, placement of students, supervision and evaluation of these off-campus "courses" are critical to the success of postsecondary programs.

Administration. Post-high school programs are beginning to involve a much larger and more specialized staff than is typically found in high schools. One of the staff members usually assumes administrative responsibilities for the program. Post-high school teachers need to know how to function as part of a team. They need to know how to be effective administrators of vocational and technical education programs if

quality programs are to be developed and staff morale maintained at a high

Evaluation. One way by which public post-secondary programs are likely to be evaluated is on their ability to provide training more efficiently than the private segment of society. Lack of quantitative evidence regarding the economic efficiency of programs could result in unfavorable evaluations. Evaluations might include a comparison of the increase in earning power of graduates of post-secondary programs over persons not receiving this type of training. Evidence reflecting the savings in the training costs of employers may serve as another evaluation criterion. Post-secondary personnel must be prepared to provide this type of evidence.

#### A Beginning

The rapid development of post-secondary vocational and technical education in the junior colleges of Illinois precipitated the adjustment of the teacher-education program at the University of Illinois to meet the emerging needs of newly employed post-secondary teachers. An initial step involved the establishment, as part of an existing extramural course, a special section for newly employed junior college teachers of agriculture.

This was one of the first steps initiated by the Agricultural Education Division, University of Illinois, to meet this emerging need.

#### Objectives of In-Service Course

The objective of the course for new post-secondary vocational - technical teachers is, in broad terms, to help each teacher do best that which he or she was hired to do. The course focuses upon the problems and concerns of the teachers in such areas as instruction, development of curricula, placement employment programs, administration of programs, the role of the post-secondary school in the total educational system, and program evaluation.

#### Enrollment

All newly employed vocational-technical teachers in post-secondary schools (Continued on next page)

THE AGRICULTURAL EDUCATION MAGAZINE

are eligible to enroll in the course, Experienced high school teachers, gradnates of college programs other than Education and men and women from industry who are not college graduates have participated in the course. Students may enroll for 1/2 unit of graduate credit, 2 semester hours of undergraduate credit or as a "Visitor," depending upon their situation.

Instruction: The course provides a total of thirty-two hours of group and individual instruction during the academic year. Group instruction consists of three, one-day workshops conducted on the campus of the University of Illinois, Instruction is provided by the Agricultural Education Division staff as well as resource persons from the College of Agriculture, the College of Education and representatives of the State Board for Vocational Education and Rehabilitation.

An Agricultural Education Division staff member conducts three all-day instructional visits to each post-secondary institution represented in the course during the academic year. Each teacher is observed conducting one or more classes in his or her institution. The course instructor and the teacher participate in a critique of the teaching. Small group instruction is conducted during the visitation when more than one teacher at the institution is enrolled in the course.

In addition, the course instructor meets with the administrators of the post-secondary school and of vocational-technical education to discuss the existing programs. Special attention is given to the plans for development and expansion of the vocational-technical education program in agriculture.

#### Summary

The extramural in-service education course offered to newly employed postsecondary vocational-technical teachers received the support of the teachers, their administrators, the Illinois Division of Agricultural Occupations and University of Illinois Colleges of Agriculture and Education. This attempt to meet unique needs of a newly emerging group of teachers is one which apresults in Illinois. While this type of post-secondary teachers, it has proven to be a successful action step which may be applicable in other states.

# Reading Problems in Technical Schools

HILDEGARD HILTON, EDWIN O. SMITH University of Connecticut

Vocational agriculture teachers, like teachers in all other school subjects, frequently find that their students' reading ability does not measure up to the demands of the course. In any normal heterogeneous class, the teacher can expect to find a range of several years in reading ability, and he may even find a few students who cannot cope at all with the reading materials.

What are some of the reading weaknesses of students, as observed by teachers? Failure to read a question or statement in its entirety, failure to read it accurately, failure to grasp the main point or to see the relationship between a main point and details, and failure to follow directions. Actually, these weaknesses may be due to more basic reading problems, which we might group into two categories:

- 1. Vocational problems. A student may fail to apply the various skills for figuring out unfamiliar words; he may neglect to make use of context clues to word meanings; he may ignore familiar "signal" words; or he may have a meager vocabulary.
- 2. Organization problems. Unorganized facts are useless; and the student who does not organize facts will have trouble remembering them or distinguishing between important points and minor details.

All school subjects demand certain common reading skills. Some of these are: making proper use of textbooks and their study aids; relating main points and details; recognizing typical patterns or relationships in the data; making generalizations and drawing conclusions from the data; interpretpears to have value based upon the ing graphic materials; following directions; and understanding the vocabucourse does not meet all the needs of all lary and special terminology. Not all students will be able to perform these verbal tasks competently without some help from teachers.

#### Vo Ag Teachers Seek Help

This year the vocational agriculture teachers in one school sought advice on the reading problems of their students. The school's reading specialist made a detailed analysis of the technical materials used in an experimental course on small gasoline engines. Some rather striking characteristics of this type of literature became apparent:

- 1. The vocabulary load is very demanding, involving every aspect of a student's fund of language equipment. Surprisingly, the technical and scientific vocabulary is not so troublesome as the general vocabulary, which accounts for the greater bulk of wordage, and which makes up the essential cement that binds the technical facts and terminology.
- 2. The technical data fall into clearly-defined, typical patterns that are widely used in all types of factual writing. Thees patterns establish causeand-effect relationships, spatial relationships, comparisons or contrasts, step-by-step sequences, and other types of relationships.

Following the analysis, suggestions were drawn up which the teachers could use for upgrading student performance. These include: a device for identifying students who are likely to have trouble reading the technical materials; model exercises for giving students in-class practice in the various verbal skills demanded by the materials; and a guide for assignmentmaking that is consistent with accepted principles and practices for improving reading.

All of the suggestions can be carried out within the existing framework of a course, without any basic changes in content or time schedule. Improvements in student performance are bound to come about as teachers become more aware of the different kinds of reading skills they expect of their students.

# Let's Cultivate The New Seed

Roy D. Dillon, Teacher Education University of Nebraska

#### The Seed Planted

The passage of the Vocational Education Act of 1963 made possible the broadening of secondary and post-secondary programs in agricultural education. As the various state plans were written, incorporated into legislative proposals, and passed into law during the year 1964, the seed for new and innovative agricultural education programs was planted, and the possibilitics began to grow.

#### **Early Cultivators**

State Directors of Vocational Education, teacher educators, state consultants and agriculture teachers in some states saw early many implications from the law.

- 1. Employment-opportunity research in off-farm agricultural occupations was initiated on the local and state basis.
- 2. Undergraduate and graduate courses in agricultural education were revised or redesigned to incorporate the philosophy of the new vocational act.
- 3. Teachers of agriculture began to develop new high school courses to train more specifically toward identified off-farm agricultural occupations for which employment opportunities exist.
- 4. State boards of vocational education encouraged and funded new and innovative vocational programs in the high schools. State consultant staffs worked closely with teacher educators to upgrade teachers, plan new instructional curriculums, and insure quality control.

#### First "Buy The Idea"

Probably the chief reason for the slower implementation of programs in several states is the failure of the state consultant staff, teacher education staff, and teacher of agriculture group to accurately define their role in order to "team-up" and "tool-up" so forward strides can be made. Each of these groups must first understand, or "buythe-idea" of how programs of agricultural education may be expanded at the secondary and post-secondary level. The policy is spelled out in the state plan, and most often interpreted in state guidelines which are made avail-

able to schools. It is imperative that state consultants, teacher-educators, agriculture teachers, and researchers be involved in the development of these state guidelines, because the state policy and guidelines will form the foundation upon which new and innovative school programs can be developed by teachers and school administrators. There has, however, been a wide difference in the "rate of progress" among the various states with respect toward the implementation of new or redesigned secondary and post-secondary programs.

#### The Teacher Educator

The teacher educator's responsibilities should include:

- 1. Preparation of new teachers of vocational education. Teacher preparation programs should be redesigned to more adequately qualify the new teacher as a total agricultural - education program organizer. Graduate programs should be offered to provide a continuity, to broaden the agriculture teacher's professional base, and enable him to effectively organize the various resources within the community for his vocational program. For example, all first-year teachers in the state should be concurrently enrolled in in a graduate course designed to discuss problems encountered their first year on-the-job. Visits to observe their teaching and program planning by the teacher educator should enable the teacher of agriculture to more easily cope with problems encountered. As school systems consolidate, more multiple teacher departments may be established, and a tendency toward specialization should occur. The agriculture teacher-planner in the high school and post-secondary technical programs must be well grounded in improved methods of teaching new kinds of courses, and be willing to try new and different teaching procedures.
- 2. Provide in-service and graduate program. Teachers of agriculture who have been graduated for several years should be encouraged to upgrade themselves through



Teacher-educator and State Consultant in Agricultural Education work with a first-year teacher at Neligh, Nebraska. Left to right: Dr. Roy D. Dillon — Teacher Educator, University of Nebraska; Mr. Larry Viterna — First-year Teacher of Agricultural Education, Nelight, Nebraska; Mr. Roy Equal — Consu'tant in Agricultural Education, Nebraska State Depart. ment of Education.

- participation in redesigned graduate courses, short courses, or workshops. Many teachers will request assistance, and it should be the role of the teacher-educator to provide formal in-service programs designed to encourage the agriculture teacher to an action program-re-evaluation. The state consultant staff should be involved as resource personnel in these courses.
- 3. Perform and stimulate field research to more adequately assess employment and curriculum needs in production agriculture and offfarm agriculture. These research projects may utilize the joint resources of the state consultant staff, teacher educators, and agriculture teachers.

#### State Consultant

The role of the state consultant should be:

- 1. Insure that the program of agricultural education is being conducted within the state plan and established guidelines. The state consultant is in the unique position of being able to provide "onthe-spot" help with respect to program organization. He can help the teacher identify problems, and determine what resources should be used to solve the problem.
- 2. Helping school administrators, guidance counsclors, teachers, boards of education, agricultural citizens advisory committees, and lay groups develop an understanding of the role of a broadened program of agricultural education in the total school program.

Group meetings can be held for teachers within a close proximity who may have common problems. Teacher educators may be utilized as resource persons at various times in these meetings. State conferences should provide "working conference time," whereby teachers, working together in small groups, can identify and discuss solutions to common problems. The group interactions, sharing of successful experiences, and opportunity to utilize capable resource persons should help the teachers obtain some answers to identified problems.

4. Encourage teachers and school administrators to re-evaluate present programs of agricultural education in the light of available local, state and regional data, and at the same time make possible "on a pilot basis" the funding of new and innovative programs that might not fit the guidelines,

#### The Teacher

The teacher of agriculture is the third and most important member of the "team." It is his responsibility to "tool-up" to his best ability in order to earry on a well-planned program in the community. He must:

- 1. Acquaint himself with the guidelines for implementing and carrying on a broad program of agricultural education in the local community.
- 2. Study the local, state and regional employment needs data. Utilize the help of advisory persons in gathering data needed for the assessment of vocational program needs.
- 3. Work closely with the school administrator, board of education, state consultant staff, and teacher educator in developing a program of agricultural education for the local community. He must be willing to try new ideas, and contact the supervisor or teacher ing and developing plans. educator concerning problems incurred in teaching and program development.

#### Cultivate Well

In summary, innovative and redesigned programs of agricultural educaprograms are initiated by teachers of agriculture with joint leadership from

3 Gonduct in-service conferences. teacher-educators and state consultant ideas." There should be joint leaderstaffs. The teacher education program ship by teacher-educators and state must prepare young men who are capable of organizing and carrying on broad programs, and at the same time provide continuity into the teaching experience through problem or research oriented graduate courses. The state desire to prepare or upgrade his talents, consultant staff can insure quality con- look positively at program developtrol by providing individual attention ment, be willing to ask for help from on a need basis, insuring that programs follow established guidelines, and mak- program operation, and evaluate proging possible the funding of "pilot ress continuously.

consultants in recruitment, pre-service education, in-service education, placement, follow-up and research. The teacher of agriculture is the "action agent" on the team, for he must have team members, establish policies for

## **Book Reviews**

Saloutos, Charles, AGRI-BUSINESS recommendations have been used MANAGEMENT, 440 W. Cedar St., Platteville, Wisconsin 53818, Mr. Charles Saloutos 1967.

Approximately 250 pages including pictures, tables, charts, and illustrations, 8½" x 11", soft covered, plastic postage. A Teacher Edition is available with a general outline to be followed with each chapter listing the objectives, teacher-student activities to be worked out, and references to aid in teaching.

"Agri-Business Management" has been written primarily to meet the needs of high school seniors and vocational agricultural instructors in the course called Farm Management. The terms farm and farmer have been taken out of content and replaced with Agri-Business and Agri-Businessman to keep abreast with the growing trend and changes in the field of Agriculture.

Uses the problem-solving approach in developing any agri-business problem a student may wish to choose. The problem starts with the student working his own homestead or developing a two-hundred to three-hundred acre business. He develops his own business with whatever enterprise or diversification he chooses. As he progresses into the text, many managerial practices that he has studied will become beneficial to him in understand-

The basic principles are used throughout the text in developing plans and working out requirements. The author has emphasized management in such ways that the student can apply management to his problems.

tion will be possible only if ACTION in taking a problem-solving approach ment Programs for Farm People. to a business problem should find this text very useful. Most of the latest

throughout the text.

Charles DeNure Head, Dept. of Agr. Education Dean, School of Agriculture Wisconsin State University— Platteville

bound and priced at \$3.50 each plus Bishop, Charles E., Editor, FARM LA-BOR IN THE UNITED STATES, Columbia University Press, 440 West 110th Street, New York, N. Y., 10025, 1967. pp. 143, Price, \$6.00.

> Technological progress in American agriculture has made it possible to greatly increase the productivity of farm labor and to significantly increase the production of farm products, while sharply reducing the number of farm workers. In spite of these increases, productivity per farm worker remains low and the low return for labor employed in agriculture persists.

> This book, a collection of seven essays, examines the reason for the low productivity and how returns of farm labor and makes suggestions to relate manpower policy for agriculture more explicity to national manpower policy and to general economic goals.

Each essay was prepared by a recognized authority in the subject matter area and first presented as papers at a conference on farm labor in Washington, D.C., in October, 1965. Titles of these essays are (1) Dimensions of the Farm Labor Problem, (2) The Current Situation of the Hired Farm Labor Force, (3) Farm Labor Adjustments to Changing Technology, (4) National Employment Skills, and Earnings of Farm Labor, (5) Occupational Mobility from the Farm Labor Force, (6) Farm Manpower Students who are keenly interested Policy, and (7) Manpower Develop-

—Guy E. Timmons Michigan State University

Page 43

## A PILOT PROGRAM IN ADULT FARMER EDUCATION

RAJENDRA PAL SINGH, Reader and Chairman, Agricultural Education Department Regional College of Education, Aimer, India

LOWELL E. HEDGES Consultant in Agriculture, U.S.A.I.D., Ohio State University Team Regional College of Education, Ajmer, India

Indian agriculture, like the rest of the economy, is undergoing rapid changes caused by technological developments, an increase in the nation's population, and many other pressures. Vocational agricultural teachers in the secondary schools are concerned about these nation-wide changes and trends in agriculture and business, and are wondering how best to carry out education's role in these changing times.

The Department of Agriculture at the Regional College of Education, Aimer, believes that one of its functions, as well as that of the Demonstration Multipurpose Higher Secondary School attached to the college, is to help the teachers of agriculture search for ways to adjust their programmes to keep pace with the changing times.

These changes in agriculture prompted the college to re-evaluate not only what should be taught, but who should be taught by the secondary school Agricultural department. In reviewing the research and practices of vocational agriculture in India and in other countries, and the needs of agriculture in India, the staff found ample evidence that an education programme for established farmers was needed in India. Some of these evidences were: (1) Fathers of boys enrolled in agriculture in secondary schools were coming to the teacher of agriculture for advice on improved practices in crop and livestock production; (2) A majority of the established farmers in local communities have not had agricultural training of even a secondary school nature; and (3) The number of farmers coupled with rapid technological advances in agriculture puts too great an educational load on the present number of government agricultural extension workers.

#### Some Assumptions

In planning the pilot programme, the staff considered certain assumptions as basic to the study in addition to the previously mentioned evidences of need, (1) Before adopting a new

practice, farmers are skeptical about the success of the practice. (2) Farmers are more ready to adopt a new practice if the success of the new practice has been demonstrated in their home area, using local production materials as much as possible and using these on local soil types. (3) Farmers learn more quickly and accept new practices sooner by discussing common production problems in a group environment under the leadership of an agricultural education leader. (4) The basic education principle of "learning by doing" is applicable at all age levels. (5) With normal physical facilities plus competent agriculture teachers, secondary schools could conduct effective adult farmer education programmes. (6) Government agricultural extension workers are available and willing to assist secondary schools in their respective localities in organizing and conducting adult farmer education programmes. (7) The secondary school teacher of agriculture, while supervising a boy's home project, can conveniently assist the father with production problems. This assistance could well be a follow-up of a systematic classroom instruction programme for adult farmers. (8) Continuing education is vital for the farmer in order that he may become more effective in his vocation.

#### Purpose of Pilot Program

The main purpose of this pilot programme was to devise an adult farmer education programme that could be conducted successfully by a secondary school agricultural department. The primary objectives of this pilot programme were: (1) To discover an effective procedure for organizing and conducting adult education programmes in secondary schools having departments of agriculture; (2) To aid the demonstration school and the regional college in establishing a good rapport with the farmers of the community and the agricultural development staff; (3) To instruct selected fertilizer and other production materi-

local farmers in the improved production methods of growing Mexican Sonora-64 wheat; and (4) To attempt to answer as many questions as possible (within the time limits of the daily programme) that the farmers may





have concerning the production of barley, peas, and gram.

The reason for objective one was to carry out the purpose of the study Objective two was considered a necessity in view of the need for further research in adult farmer education to be conducted by the college and demonstration school, Objectives three and four pertained to the actual improved production practices for the farmers attending the programme, Other secondary schools could well use objectives similar to two, three and four in the organization of their local adult farmer education courses.

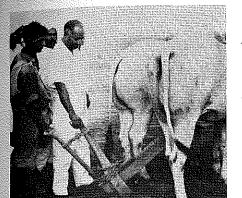
#### The Program

The agricultural authorities had already distributed the necessary supplies like seeds, manures, fertilizers, insecticides, herbicides, etc., to selected farmers about a week or ten days prior to this programme. It was felt that the farmers would be most receptive to any instructions on the proper production practices for wheat and other Rabi crops at this time.

In order to ensure that the adult farmers attended such a programme, it was necessary to make this schedule short and limited to one or two days because of the busy season for the

The programme took place in the Department of Agriculture, Demonstration Multipurpose Higher Secondary School of the Regional College of Education, Aimer. It was necessary to arrange this programme in the school and on the school farm, using the school facilities, since one of the objectives of the study was to devise an adult farmer programme that could be conducted by a secondary school.

Farmers who were supplied with the Mexican Sonora-64 wheat seed,



als by the District Agriculture Officer, Ajmer, were invited to participate in this pilot programme. The choice of such farmers was limited to only one Panchayat Samiti (one block only). This was the block in the jurisdiction of which the school lies. Since it is planned to follow up the practices adopted by the farmers attending the programme, it was necessary to restrict the size of the area served by the pilot programme.

#### Responsibilities

The various duties related to organizing and conducting the programme were divided among the staff members of the demonstration school and college agricultural departments.

The demonstration secondary school teachers, S. P. Singh and V. V. Kimothi, had the main responsibilities for organizing the programme. These responsibilities included transportation arrangements, daily programme schedule, use of buildings and rooms, cleaning and rearranging of classroom and its furniture, water and tea facilities, editing and printing of instructional materials to be distributed to the farmers, printing of the daily timeschedule, and other miscellaneous details.

R. P. Singh, Reader in Agriculture, explained to the farmers the correct practices in producing wheat, and also demonstrated the correct practices in sowing the wheat. He further assisted the demonstration school staff in editing the mimeographed instructional materials pertaining to the improved agronomic practices required in order time schedule very closely. to obtain maximum yields of wheat.

and specific problems relating to the production of wheat, gram, peas and were distributed to the resource per- discussion, the group moved to the sons for answering during the second day's programme.

In addition to the faculty members of the college and demonstration school, the following persons were invited to assist with the technical portion of the programme: B. M. Raina, District Agriculture Officer, Aimer, and P. N. Lalla, Assistant Plant Protection Officer, Ajmer.

The District Agriculture Officer and the Assistant Plant Protection Officer are the persons charged with the responsibility of distributing production materials to the farmers. Also, the Assistant Plant Protection Officer was the local competent authority to assist with answering questions relating to diseases and pests of Rabi crops.

#### The Schedule

The pilot programme was scheduled for two hours each day: 4:30 to 6:30 PM. There were several reasons for this period of time. The farmers did not want to leave their field work any earlier in the day. The extension workers needed the early part of the day to contact the farmers concerning attendance. The afternoon hours facilitated the use of the school bus for transporting farmers to the demonstration school.

The staff decided to use the school bus for transportation because of the desire to enroll all farmers who had been given supplies for the production of Sonora-64 wheat. Providing transportation for these farmers would help ensure the successful follow-up of the pilot programme, and future research involving these farmers.

In planning the time schedule for the programme, considerable time was spent by the staff in determining as exactly as possible the amount of time required for achieving the various objectives of the programme. Emphasis was placed in the planning as to proper allowance for travel time between the bus stop and school, to and from classroom and farm, tea break, and time for answering questions. The staff was able to follow the alloted

The first day's programme centered M. G. Kelkar, Lecturer in Agricul- mainly around a presentation of imture, assisted by collecting important proved practices in growing Mexican Sonora-64 wheat. A review of these practices was conducted in the classbarley. These questions or problems room with the aid of publications rewere obtained from the farmers during ceived from the Extension Library in the first day's programme, and then New Delhi. Following the classroom

school farm laboratory, where proper procedures for sowing seed and applying fertilizer were demonstrated. Two methods of sowing were demonstrated: tractor-pulled seeder and the Desi plough hand-seeding method. The farmers had an opportunity to observe these methods in operation, and to ask questions concerning the practices involved.

The group then moved from the farm into the classroom where time was taken to obtain questions from the farmers concerning their problems in growing barley, peas, and gram. The questions were then used as a basis for next day's discussions. Tea and conversation completed the first day's programme.

#### Role of FFI

The role of the FFI (Future Farmers of India) organization and the B. Ed. students ought to be mentioned at this point. The FFI members were responsible for the serving of water and tea. They also acted as guides, directing persons to the classroom. farm, transportation, etc. The B. Ed. students assisted with some of the demonstrations, and also helped guide the farmers to the demonstration areas at the school farm. The value of using student groups in conducting adult education classes is evident from the success attained by the FFI members and the B. Ed. students.

The second day's schedule was divided into three main areas. The first part of the programme concerned the answering of the questions on producing barley, peas and gram that the farmers had raised the day before. The next portion of the programme was further demonstrations of sowing wheat on the school farm. This session was necessary because many farmers still had further questions on wheat pro-

The third portion of the program was a discussion on problems relating to diseases and pests of barley, peas and grain. Mr. P. N. Lalla, Assistant Plant Protection Officer, handled this

#### Results

The pilot programme in adult farmer education was attended by thirty farmers. In addition, approximately thirty extension workers attended, as well as sixteen college agricultural stu-

(Continued on page 46)

#### A Pilot Program

(Continued from page 45)

The major observations and conclusions of the pilot programme are as follows: (1) A keen interest on the part of the farmers for the programme was noted. Evidence of this interest was found in the high degree of discussion on questions raised during the programme. The degree of interest points up the need to select farmers who would most likely benefit the most from this type of programme. The fact that the farmers attending the adult education programme had been issued seed of the new Mexican wheat probably contributed considerably to the degree of interest. (2) The two-hour length of time for the daily programme seemed to be adequate. (3) The fact that the daily programmes began and ended on time proved the value of the time spent in carefully organizing the time schedule. (4) The alloted time for field demonstrations could have been shorter. (5) The alloted time for discussing the questions raised by the farmers on the first day was adequate. (6) The additional time of ten minutes given on the second day for any new problems not mentioned on the first day proved very useful. Several farmers presented some very challenging questions. (7) The presence of the District Agriculture Officer helped build a quicker rapport between the staff and the farmers. This was probably due to the fact that the District Agriculture Officer had been working with the farmers and they were acquainted with him. The school staff had also worked with the District Agriculture Officer on previous occasions.

#### Implications

On the basis of experience gained in organizing and conducting the pilot programme in adult farmer education at Ajmer, some implications for fuutre programmes are apparent: (1) Adult farmer education programmes can be and should be conducted by secondary school agricultural departments having trained teachers of agriculture. (2) Such programmes should be organized at least two times a year - once in the latter part of June or the first part of July for production of Kharif crops, and the second time during the last week of October for Rabi crops. These would be the minimum number of times for the adult farmer education programme. Additional sessions should (Continued on next page)

Guest Editorial

# Forty Years Beside A Teachers Desk

(Continued from page 30)

The grading of students was always a difficult task for me, because of the many factors to consider. During my early high school teaching days, the faculty held staff meetings at the end of each six-week period, just before issuing grade cards to the students. On this particular evening we were discussing a lad named Jack. The English teacher announced that she was about ready to flunk him in English; I was just ready to say that Jack was to receive the highest grade in my vo-ag class. We argued for a while and then the English teacher closed her remarks by saying, "In my book, Jack is the dumbest kid in school." About three weeks later we were holding an after-school F.F.A. meeting in the "Ag" room. Some of the boys had crowded their cars in around the building in such a manner that the English teacher could not get her car out. She knocked at the door and informed us of the situation. I turned to the Sentinel, who happened to be Jack. and asked him to help the lady. He was back in a moment, the task completed As he took his seat he remarked to the group, "That is the dumbest teacher I ever saw." This perhaps bears out what Will Rogers once said, "We are all dumb, but in different ways."

One year in my Freshman class I had a husky farm boy, who would on certain occasions "cuss". My teacher education courses in college had stressed the point that vulgar language was not proper. So, from time to time, I informed the lad that he must not do such things in class. One afternoon, after a rather loud outburst of profanity, I grabbed him by the collar and in a loud, angry voice told him if he ever "cussed" again in class he would be kicked out of school. That frightened him and things went along quite well for several weeks, Then, one afternoon he was working at the forge, dressed in a pair of loose fitting coveralls, unbuttoned in front. He was not a skilled blacksmith, and as he worked on a bar of hot iron, one small piece chipped off and hit him. As it went sizzling down his hairy chest, "cuss" words flowed freely into the smoky air. Every student stopped work and listened. They remembered my threat. The only thing I could do was to take the young man by the hand and show him the door. I will never forget watching him walk slowly down the road toward home. I had a feeling that perhaps I had made a mistake. At four o'clock I jumped into my Model-T Ford and drove out to the farm where he lived. The father, the mother, and the young man were seated around the kitchen table. I tried to break the ice by commenting on the weather, but it didn't work. Finally the father said, "so you kicked Bob out of school today". I answered, "Yes". After a long silence another question pertaining to the reason was asked. I tried to explain that Bob had "cussed" in class. As I finished my brief explanation the father jumped out of his chair, struck the table with his fist, and with a stream of profanity, far beyond anything I had ever heard before, explained that if I didn't want Bob to "cuss" in class he would see to it that he didn't. I expect young Bob knew many of the words his father used with such proficiency long before he ever heard the ABC's.

Just in case you are wondering, Bob returned to school and is today a prominent business man. Years later, while visiting about this occasion, Bob remarked, "I walked home that afternoon and started building up a hatred for teachers and schools. I decided that I'd show them just how tough and rough I could be." Not knowing the home conditions of this student almost cost America a good citizen and perhaps a quarter of a million dollars.

It is impossible to tic together forty-three years of experiences in one short article. I do have one more experience that I must tell. It is basic to all vocational education.

This experience took place at a State F.F.A. public speaking contest many years ago. Contestant "number 6" walked out on the stage. He was a big sixfoot-two cowboy. He stood on the stage, silent for a moment, then stated, "My topic is "Two Bulls". Some folks smiled, others leaned forward eagerly to hear his message.

It was the story of his vo-ag project. He told about his decision early in the fall to buy two bull calves, grow them out and then sell them as breeding bulls to some Sandhills rancher. He explained that it took about two weeks to read all of the books and bulletins on the subject even though he read each night for several hours. On a certain Saturday the father, the vo-ag teacher and the boy got in the pick-up truck and started looking for calves. It was late in the day before they found just the ones they wanted. After the calves were penned at home, other problems arose. What was the best ration? How much exercise should they have? But, as the young speaker pointed out, "I got lots of help from the school library and my vo-ag teacher. The lad spoke in typical cow country language. I remember at one place in his speech, he said, "I'd go home at night and sit on the corral gate and look down on the critters and wonder just how well they were doing". He explained that during the summer he encountered different problems.

Then he told of preparing the calves for the shows and about his experience at Crawford, Nebraska. It was a big show with leading breeders from three states exhibiting livestock. He admitted that at one time as he led his bull to the show ring, he felt his knees shaking. Pride and happiness were shown in the young speaker's face as he told about getting third place and a white ribbon.

A month or two after the show he took the two bulls to Lusk, Wyoming to sell. Telling about the sale was the climax of his speech. As I recall his story

went something like this:

"I heard my number called. I led the first bull out and started around the arena. Soon I heard the chant of the auctioneer, "At a 400, 400; now 425; at a 450 and now I want 475, 475, 475; now 500, 500, at a 525, 525; now 550, 550; sold for \$525. The other bull sold for \$500".

The closing line of his speech was,

"I must admit as I took the halter off the last bull, a few tears went down my dusty cheeks, because I had learned to love those bulls as I eared for them over a period of 15 months."

To the young speaker it was the story of two bulls, but to educators it was the story of modern learning. He was never told to read Chapter 4, or outline a bulletin. He was motivated to study and to solve problems because they were real and he needed the information. He enjoyed the study and the work because he loved ranch life and cattle.

In forty-three years I have discovered that the best investment, is not stock, bonds, land and oil, but rather, it is investment of time, attention, love and encouragement in the youth of America. It is an investment in which everyone wins — the pupil, the teacher, the school, the community and the world.

Men in the field of education have always realized that schools do not exist to classify people or to climinate the unripe. Instead, each person is a resource of the community, and it is the school's function to develop that resource as far as possible.

Teachers must know, understand, and love their students, realizing that every one is some mother's child and has value, then perhaps the student will in turn apply that great principle of brotherly love in his home, his community, his country, and his world. It is my opinion that our hope for a progressive twenty-first century is tied very closely to the principle of learning that implies the knowing and understanding of people.

It was Thomas Jefferson who said, "It is the manners and spirit of a people that preserve a republic in vigor". After forty-three years beside a teacher's desk I can say with all sincerity that I know of no more certain way to preserve our national vigor, than by carefully cultivating and inspiring each individual so that he achieves the attitudes, the skills, and the knowledge necessary for the maximum realization of his potential. This intention must become the prevailing spirit of our schools.

## **Book Review**

McDonald, Elvin, "THE COMPLETE BOOK OF GARDENING UNDER LIGHTS," Doubleday & Co., Inc., Garden City, New York, 1965, 215 pages, \$4.95.

Bursting seedpods on hybridized plants, conflict between a tough seed coat and a determined embryo, striking growth patterns of the "short day" plant exposed to a long day; these and many other intriguing demonstrations of plant growth principles are possible in the agricultural classroom.

The teaching of plant development through visualization of the principles adds "vigor" to the learning atmosphere. Many of the principles can be taught right in the classroom through the use of phytoillumination—artificial lighting.

Mr. McDonald's initial experience with "one-room" gardening occurred on a small ranch in Oklahoma and he writes with authority about seed and plant propagation, types of potting soils, plant pests and diseases plus all the other interesting activities possible with seeds and plants grown under lights.

The book is written for garden enthusiasts but there are a multitude of ideas one can easily transfer to vivid classroom learning situations,

> James Hannemann Michigan State University

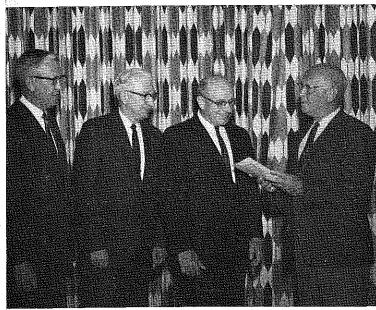
#### A Pilot Program

(Continued from page 46)

be arranged according to the needs and desires of the local farmers. (3) For effective learning to take place, not more than thirty farmers should be invited to participate, Most school classrooms will not accommodate a larger group. (4) A well-planned field demonstration should follow a classroom instructional programme. (5) The services of the District Agriculture Officer should be used in organizing and conducting the adult farmer education classes. (6) If held two or three hours prior to darkness, the adult farmer classes can be conducted with a minimum of inconvenience to the farmers. (7) The secondary school teacher of agriculture should conduct a systematic follow-up programme of "on-the-farm" instruction for those farmers attending the adult farmer course.

S-08
COTTECE OF ED G OF KY
TEVCHEB TBV NEB VO-ED
HEBBERT BROCE OH

# Stories



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

# Pictures

GILBERT S. GUILER
Ohio State University



Summer School at Ohio State University allows for a period of professional relaxation by consumption of the citrillus vulgaris.

in



Officers at the newly formed Agricultural Education Society at the University of Kentucky. Left to right (seated) Bruce Metsger, Secretary; Virgil Quisenberry, President; Jack McAllister, Vice President; (standing) Joseph Wylet, Treasurer; Dr. Herbert Bruce, Department of Agricultural Education; Jack W. Crowder, Historian, Photo by Luster.



# Agricultural Education

Volume 40

September, 1967

Number 3



ALABAMA TEACHERS FIND TEACHING IN THE GREENHOUSE VERY EFFECTIVE.

#### FEATURING TEACHING EFFECTIVELY