The AGRICULTURAL EDUCATION Magazine

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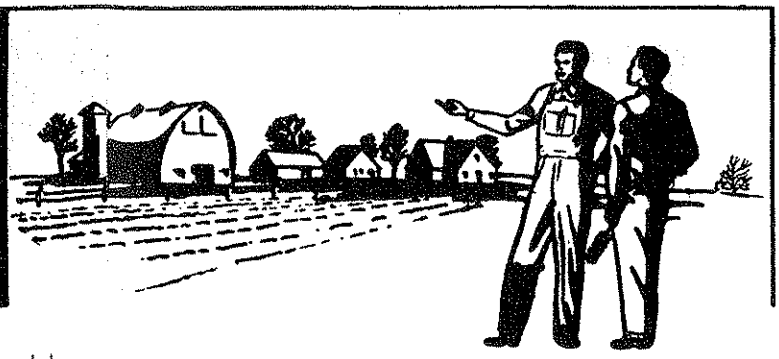
Picture legend, page 263

Featuring— **Evaluating Programs of Agricultural Education**

The Agricultural Education Magazine



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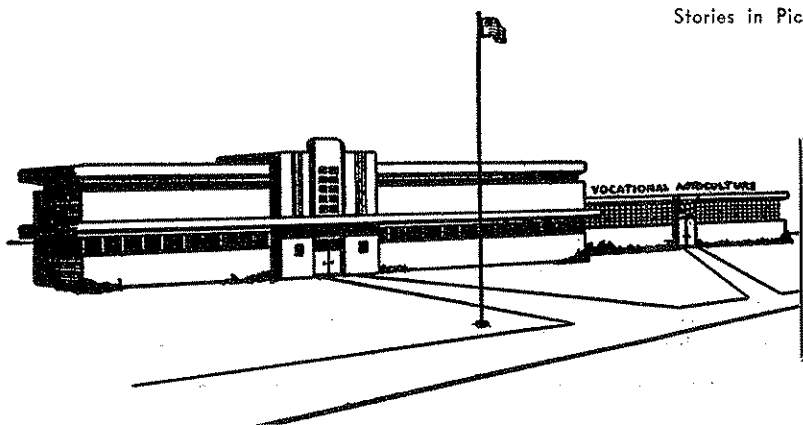
Contents



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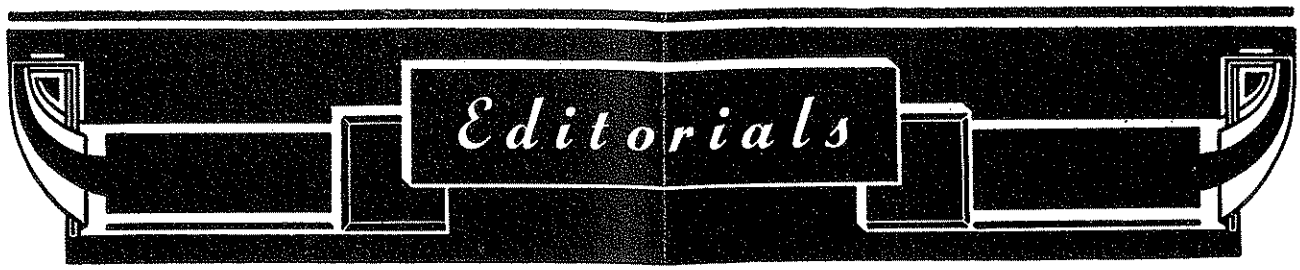

Chickens Coming Home to Roost

H. M. HAMLIN, Teacher Education, University of Illinois

We are going through a critical period in agricultural education. It is critical primarily because our program is being evaluated by others than ourselves, who use standards and procedures different from those to which we have been accustomed.

Our chickens are coming home to roost. We have steadfastly insisted on evaluating our own work. We have refused to encourage the participation in evaluation of those who are now evaluating it, who might through experience have learned to evaluate it fairly.

The basic questions and answers regarding evaluation are the same as they have always been.

Who has the final authority for evaluating public school education in agriculture? Obviously, this authority is vested in the public or its representatives, not in teachers, supervisors, or teacher-trainers.

What standards should be used in evaluation? The standards that will be used derive from the values of the society doing the evaluating. A community with no conscious values, or low values, is likely to expect very little or to expect what is actually bad for it from agricultural education. If the highest values we know guide evaluation, our evaluators will expect us to help all with whom we can possibly work to develop their full and balanced possibilities as human beings and members of society. Concern will not be limited to high school boys from the farm but will embrace all, regardless of sex, race, age, occupation, or place of residence. A public following its highest values will prize vocational education in agriculture, but it will also see the contribution agricultural education might make to the general education of all.

What should be the process of evaluation? Since the public is the ultimate evaluator, representatives of the public should be the principal participants in official evaluations. Those who have shared in any way in planning the program whose outcomes are being evaluated should not be included. Those thus excluded are teachers of agriculture, school administrators, members of advisory committees, and supervisors. The evaluating group should get help from all possible sources, including the groups excluded from the decisions involved in evaluation. Reports of evaluations should be made to boards of education for careful consideration and appropriate

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From the Editor's Desk . . .

After You're Gone —

It is to be hoped that procedures for continuing evaluation of programs of agricultural education will result in progressive improvement in these programs. But in the final analysis, the most searching evaluation of the vocational agriculture teacher's work probably takes place after he leaves a position and community for another position—or after he retires. It is inevitable that what he did will be compared with what the "new teacher" does—and the "new teacher" will automatically make the most critical evaluation of all. The following aspects of the vocational agriculture program seem to be especially sensitive to "after you're gone" evaluation:

1. *Course content*—students' comments that "you get the same old thing every year," and farmers' comments that "all they do is prepare for contests" are ample evidence that the course of study is evaluated both directly and indirectly. This kind of criticism can be eliminated by proper balance of course content among the various broad instructional areas—and by providing adequate time for sound teaching the first time a problem area is considered. Repetition can be left for individual and on-farm instruction. "Going just a bit deeper" is a mighty thin argument for a good student protesting "warmed over" problem areas.

2. *Governing students*—a teacher must have control of his class if he is to teach effectively. Knowledge of a lack of such control is nearly always widespread—contrary to what we might like to believe. Respect for teacher and program cannot co-exist with inability to govern students properly.

3. *Farm visits*—the teacher who hears a farmer say, "This is the first time an agriculture teacher has set foot on my place," is forewarned that the public does recognize this part of his work. The "desk driver" is so named for a reason.

4. *Quality of work of students*—the quality of the work of students is measured, in part, in terms of the effectiveness of the farm practices the students use, the quality of their farm shop construction, and the level of understanding developed regarding farming problems and operations. Inadequate understanding and faulty workmanship cannot withstand close inspection.

5. *Materials of instruction*—the new teacher is the person most likely to uncover the failure of his

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It is possible to identify - - -

Qualitative Teaching

ARTHUR FLOYD, Teacher Education, Tuskegee Institute, Alabama

Arthur Floyd

A law violator, proud of his prowess as a bootlegger, persisted in boasting to his associates of his skill and fearlessness in supplying his customers with the forbidden spirits. As he boasted, one of his associates informed him that a policeman was in their company and was overhearing the conversation. The bootlegger informed his associate, with some emphasis, that "I don't care anything about a policeman. I'll sell him a quart!" The policeman gladly accepted the challenge and without further ceremony ordered his quart. "Give me the money and hold my bundle until I return," advised the bootlegger. The policeman readily acquiesced and waited with restless anticipation for the return of the bootlegger. After waiting a reasonable length of time, according to the policeman's reckoning, the bootlegger should have returned. With some apprehension, the policeman decided to open the bundle left by the bootlegger, hoping that it might, per adventure, locate the whereabouts of the bootlegger. The policeman was loath to lose his potential prisoner and more especially his money. When the policeman inspected the bundle, he found to his everlasting astonishment the quart of booze he had purchased from the bootlegger.

Is the Teacher Well Prepared?

Is the teacher of vocational agriculture as good in his job as the bootlegger is in his? Was the bootlegger skilled and wise in his effort to break the law, or was the policeman sufficiently dull witted to be vulnerable to such a shake-down?

What preparation has the teacher of vocational agriculture for that very, very small number of students in his class who would assume the bootlegger's attitude and display a disposition to "get by" without paying the price, hence losing an opportunity to become an asset to himself and his dependents? To study, to know ourselves, to develop and appreciate the value of the mind and to secure and evaluate experiences which are necessary ingredients in our growth and development have been emphasized from Socrates to Kant to John Dewey. As teachers of vocational agriculture, we still find the teaching and injunctions of those ancient, medieval and contemporary teachers and philosophers genuine.

Knowledge of Pupil and Subject Matter Important

We would further emphasize the great importance of knowing our pupils and our subject matter. We certainly should at least be as skillful and professionally competent as the bootlegger. If it is considered essential that knowing the pupil is a necessary factor in the teacher's preparation for effective teaching, with what principles and facilities must the teacher be equipped in order to become successful in knowing his pupils? To appreciate and study the pupil's background, home life, farm and rural experiences; to determine the pupil's attitude and interests in farming and farm life as compared with other competing vocational endeavors; to discover the parents' attitudes and vocational desires for their children and to consider the realizable and attainable goals pupils set for themselves after seriously studying their facilities, know-how and do with—these the teacher must do to acquire sufficient information and knowledge to be of greatest assistance in guiding and counseling his pupils and in giving significant assistance to the parents.*

In putting over a satisfactory teaching program, it appears, at least to this observer, that knowledge of subject matter on the part of the teacher is of parallel importance to knowing the pupils. How many teachers, day in and day out, week in and week out, month in and month out, attempt to teach their pupils without thorough and adequate preparation? Has the teacher, in the first place, made a study in the form of a survey or otherwise of the home and farm situations and home and farm needs? Has this study of needs been analyzed into major problems? Have these problems depicting needs been organized into long and annual teaching aims and objectives? Has the annual teaching program been adjusted to a course calendar setting forth the course content and class time for each group to be taught? Has the teacher examined the course content and made a job analysis of the enterprises and activities to be taught and anticipated the kind of procedure to use in teaching his classes prior to making the lesson plans? Has the teacher realized that certain teaching jobs demand prior preparation for teaching if practical, functional, worthwhile results are to be obtained?

Preparation for Teaching is Necessary

It is likely that such teaching jobs as killing and curing meat, field selection of seed corn, and repairing and servicing power farm machinery may require a trip to a farm to determine when such activities will take place on the farm and when facilities are available at a particular farm; or it may be that the teacher needs to secure certain illustrative materials and teaching aids not on hand. Therefore, making his lesson plan or teaching plan a reasonable time (several days) before a lesson is to be taught will enable him to make adequate preparation for the teaching job. The wide-awake teacher of vocational agriculture will keep himself informed by his constant contact with the findings and recommendations of his state and federal Experiment Stations. He will discover valuable information in farm and related periodicals and related agricultural services such as Farmers Home Administration, Farm Credit, Soil Conservation, the Forest Service and Public Health. He will also make use of information put out by agricultural and related commercial concerns. The teacher of vocational agriculture who relies only on technical subject matter learned in college is following a questionable procedure in teacher preparation far inferior to the preparation even of the policeman in the policeman-bootlegger episode.

The teacher of vocational agriculture who conscientiously believes that he can make the necessary and adequate preparation for teaching all vocational agriculture pupils sitting at

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* See article "Ye Did It Unto Me." *Agr. Ed. Magazine*, March, 1957—Vol. 29, pg. 207.

Suggestions for Effective - - -

Evaluation in Vocational Agriculture

GEORGE P. DEYOE, Teacher Education, University of Illinois

George P. Deyoe

BROADLY speaking, evaluation is a process of determining how well people are accomplishing what they set out to do. People like to have tangible evidences that they are making progress toward goals or objectives they feel are important. If progress is not evident, a person feels thwarted or frustrated, as evidenced by the common expression, "I don't see that I'm getting anyplace."

Basically, education is concerned with bringing about desirable changes in people. Consequently, much of the evaluation in a department of vocational agriculture should aid in determining what is happening to people as the result of instruction in its various forms. Most of these changes may be stated in terms of abilities which contribute to increased proficiency in farming and farm living. An ability implies a type of learning which leads to intelligent action. The development of an ability is indicated by a combination of "Know how," "Know why," and "will do."

Comprehensive lists of objectives stated in terms of abilities are available in Vocational Division Monograph 21, U. S. Office of Education, entitled *Educational Objectives in Vocational Agriculture*. However, groups and individuals with whom we work are interested in formulating goals which are meaningful to them and some of these goals may be "operational" in nature. For example, a farmer may set a production goal of so many bushels per acre of corn. In determining how this goal may be reached, he realizes that he "must be able" to fertilize properly, select a suitable variety, plant at a rate which will result in a plant population in keeping with the conditions provided, control insects, etc. In evaluating the accomplishments in this situation, attention may be given to the measurement of *results* or *outcomes* and the identification of *practices* which contribute to these results. These results and the methods used, if interpreted carefully, reflect the extent to which certain abilities have been developed.

In addition to evaluating outcomes of the types mentioned, attention should be given to an appraisal of the teaching methods, instructional materials, and the physical environment or facilities provided for instruction. These are "ways and means" of providing conditions favorable to learning.

Importance of Evaluation

Evaluation in vocational agriculture is important for several reasons, including the following:

1. Evaluation helps the learners to determine progress toward goals, analyze shortcomings, and make plans for further improvements.

2. Evaluation helps the teacher to determine the effectiveness of his teaching, the strengths and weaknesses of his teaching, and how to focus future instruction to improve its effectiveness.

3. Evaluation of a comprehensive type provides a variety of information helpful in informing the public of accomplishments in the program of vocational agriculture. By identifying many of the worth-while achievements of persons enrolled, and other outcomes of instruction, the public may gain a balanced viewpoint of the contributions of vocational education in agriculture.

4. Evaluation, if properly used, leads to improvements in the total program of vocational agriculture in a department.

Characteristics of Effective Evaluation

1. Evaluation, in its broad aspects, should be focused upon the appraisal of progress toward all goals or objectives for which a department is responsible.

2. All persons affected by evaluation should share in the process.

3. All information which has "evaluative significance" should be utilized, and methods should be devised for collecting additional information which is needed.

4. Evaluation is a continuous process, although periodic "stock taking" is desirable for the program as a whole or important segments of it.

5. Analysis and interpretation are integral parts of evaluation and involve a weighing of the accomplishments and other information in terms of appropriate values and standards.

6. Evaluation should encourage people to determine whether certain goals are realistic and to become aware of new goals for successive levels of progress in desired directions.

Steps in Effective Evaluation

In effective evaluation of growth and accomplishments of people, the following steps are important:

1. Formulate and define objectives in terms which are acceptable to the learners and which are capable of being evaluated. Many of these should be stated in terms of abilities, although other types of outcomes should also be included.

2. Determine the types of evidences which indicate the extent to which goals and objectives are being attained. In general, these evidences may be classified into (1) the attainment of desirable results, (2) the choice and use of practices which produce the desired results, (3) the understanding of how and why selected practices contribute to the desired results, and (4) the continued use of good methods in situations which appropriately call for their use.

3. Devise and use methods effective for securing the above kinds of evidences. These include: (1) analyzing the kinds of farming activities in which the learners are involved as a part of instruction, (2) analyzing records and other data to determine results in terms of production levels and other indications of accomplishments, (3) surveying approved practices applied for the first time or improved, (4) holding conferences with learners to determine cooperatively the evidences of growth and achievements, (5) observing actions and incidents which reveal insight into the learner's motives, attitudes, ideals, and thought processes, and (6) analyzing plans for action developed by the learners.

4. Analyze and use the results of evaluation to improve the program.

Advisory councils or citizens' committees may aid in selecting objectives and various phases of the program to be evaluated, in collecting various kinds of information useful in

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Evaluation in - - -

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evaluation, and in analyzing and interpreting the information to determine improvements which should be made.

Some Suggested Phases to Evaluate

There is a place for comprehensive evaluations in vocational agriculture and for evaluations of selected phases. Some of these are as follows:

1. The program as a whole, including an appraisal of policies, facilities, groups served, administrative relationships, community relationships, and others.

2. A special part of the program, with consideration to contributions to broad and to special objectives, ways and means used for achieving objectives, and special outcomes and accomplishments. Thus, we may concentrate on the evaluation of farming programs of high school students, the FFA, the adult-farmer program, the young-farmer program, the facilities, and others.

3. Occupational choices and progress in establishment in farming of students who receive instruction.

4. Changes in farming and farm living of the participants. These may include a study of improved efficiency of production in important enterprises, adoption of approved practices, changes in over-all management, improvements in homes and home surroundings, etc.

5. Changes in people, as inferred from some of the above and from other evidences. These include the development of selected abilities, improved participation in cooperatives and other organizations, increased use of agencies available to farmers and others.

Methods for Improving Programs

As an outcome of evaluation, teachers, advisory councils, and the persons who are affected by a program in vocational agriculture should give consideration to needed improvements in the program or parts of it. Teachers should feel that the program belongs to the community and that anything which will improve the program should be considered.

Much of what we term evaluation is inherent in the processes of effective teaching and learning. Learners become increasingly competent in evaluating their own progress as they participate in the process. Furthermore, by so doing, they are likely to accept the findings and do something about them.

Teachers should be challenged by the opportunities for progress which grow out of effective evaluation. Plans for improvement should be developed with assistance from advisory councils and various other persons in the community. Policy matters should be considered and approval given by administrators and boards of education.

Some Suggested References

Deyoe, George P., *Farming Programs in Vocational Agriculture*, The Interstate, Danville, Illinois, 1953. (Chapter IV and portions of Chapters VI, VII, VIII, IX, X, and others.)

Deyoe, George P., *Methods and Materials for Teaching Vocational Agriculture to High School Students*. Special bulletin, Office of Field Services, College of Education, University of Illinois, 1954. (Available for purchase at $1.00 per single copy.)

Educational Objectives in Vocational Agriculture, Vocational Division Monograph 21, U. S. Office of Education, Washington, D. C., 1955.

An Evaluation of Local Programs of Vocational Education in Agriculture, Voc. Div. Bul. 240, U. S. Office of Education, Washington, D. C., 1949. □

Qualitative - - -

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his desk a few minutes the evening before is most likely pursuing a procedure in preparation that is almost as hazardous and void of desirable results and direction as flotsam and jetsam drifting about in the ocean.

How Recognize Good Teaching

How, therefore, can the teacher of vocational agriculture be reasonably sure that he is doing a satisfactory job of teaching? This writer believes that when Johnnie's curiosity moves him to excitement where he is tempted to prove or disapprove instruction given in poultry production as he carries out the instruction given and obeys the facts taught, that some teaching has aroused him to this action. If, in addition, through his own initiative he is moved to study the poultry enterprise and the poultry production in his and the surrounding communities in order to learn the poultry situation and apply the best techniques in carrying on his poultry projects, it can be assumed that good teaching has been in evidence. The experiences and interests that aroused and moved Johnnie to action are still drawn on in the teacher's effort to assist and inspire him in his future poultry endeavor. As a consequence, Johnnie begins to become interested not only in recognized approved poultry production and the status of the poultry industry in his surrounding communities, but his interest extends county-wide, state and section-wide. He becomes interested in the origin and history of poultry. He becomes interested in the various and sundry breeds of poultry. He wants to know the economic importance of the various breeds and how and what can be done to improve the breeds. Would it be too much to assume that somewhere along the way, especially regarding Johnnie's poultry course, great teaching has been done?

This is Johnnie's last year in his poultry class. He has drawn on the facts taught and experiences learned in the course, thus far. How now stands the case between he, the learner, and his teacher? Will he continue to grow in poultry knowledge and practical experiences as a result of the continuous contact with his agriculture teacher? Becoming the beneficiary of the knowledge and experiences gained and the enthusiasm aroused, Johnnie begins to analyze and compare the advantages and disadvantages of poultry production with the production of other farm enterprises and activities. He studies the comparative economics of poultry production and other farm enterprises in the surrounding area. He spearheads certain research projects in order to ascertain the best kind and quality of feed and other protective measures incident to poultry production. He writes articles for poultry magazines and periodicals giving the public benefit of the techniques and experiences that were responsible for his success. Under these conditions, it seems difficult for the writer to deny that noble teaching has been done.

The teacher of vocational agriculture must realize the fact that average teaching, good teaching, great teaching, and noble teaching (in spite of the teacher's professional preparation) all rest in the main on the teacher's knowledge of the pupil and his home surroundings, and on the teacher's knowledge of his subject matter and his ability in implementing it.

Good Teaching Is Rewarding

The teacher of vocational agriculture who applies himself diligently in season and out of season, sparing no effort in putting over the best teach-

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Our FFA Looks Even Better From Abroad

Contributions of youthful FFP compared with those of mature FFA

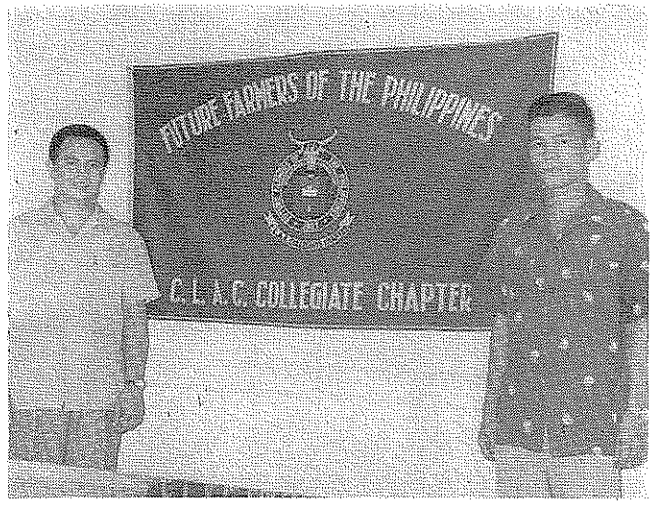
GENE M. LOVE, Stanford University*

Gene M. Love

VERY few people in the field of vocational agriculture would doubt the value of the Future Farmers of America. Most of us are ready to give credit to the FFA for the major contributions it has made to the success of vocational agriculture during the past three decades. Yet, some of us have grown so accustomed to these contributions that we take them for granted. Others have never known vocational agriculture without the FFA.

It is difficult to judge the true value of the Future Farmers of America unless we have, for comparative purposes, the opportunity to know what vocational agriculture would be like without the FFA. This condition exists in the country of our oldest democratic ally in southeast Asia—the Philippines. An occupational possession of the United States for fifty years, the Philippines naturally developed an educational system which was patterned closely after our own. This system has remained much the same since 1946 when she was granted independence. Yet, in many respects, it is different. One of these differences is the FFA.

Although the Philippines has a National Future Farmers of the Philippines organization, it is only four years old. Only one national meeting has been held and this was in June of 1957. Very few agricultural schools have active FFP Chapters. There are no local, regional and national project or judging contests and most chapters have not progressed far enough to enjoy the close association between classroom and chapter activities which we enjoy in the United States. This condition is due, of course, to the youngness of the FFP and not to the lack of ability on the part of chapter advisers. It takes time to develop supervised farming programs, chapter programs and the many and varied activities normally associated with the FFA.



Pictured above are, from left to right, Adviser Jose C. Alonzo and President Edison I. Cabacungan of the Central Luzon Agricultural College Chapter of the Future Farmers of the Philippines. In the background is the FFP banner. Mr. Alonzo studied at the Pennsylvania State University on an I.C.A. grant.

The comparative non-existence of the FFP in the Philippines at the present time is quite apparent to visiting vocational agriculturalists from the U.S.A. It is gratifying, to their egos at least, to see the comparison between Vocational Agriculture with and without the FFA. Likewise, it is thought provoking to observe classes which function without benefit of the common understandings which the FFA can provide. It seems harder for students to get the real meaning of their study activities. The sequence of student growth appears to have less organization. Social activity inside the classroom is decidedly "academic" and there is greater variation in individual purpose. One gets the impression that "the starch is gone from the shirt" or "the adhesive missing from the tape."

This analysis is not meant to be a criticism of vocational agriculture in the Philippines. Great strides have been made there in this area of education during the past decade. The Philippines could easily claim part ownership to the title of "Most Developed Underdeveloped Agricultural Country in the World." Their educational leaders deserve considerable credit for this progress, but the business of training future farmers in high schools has only begun to take shape.

In the high school located on the campus of the Central Luzon Agricultural College, at least part of the secondary students have their own projects—most of these are rice. They share in the profits of their labors while studying in the classroom. Mainly due to their training in vocational agriculture, they produce an average of 67 cavans of rice per hectare (approximately 67 bushels per acre) while the national average, including the community immediately surrounding the campus where these boys study, is only 30 cavans per hectare (30 bu./A.). These students have consistently maintained this higher rate of production while the general rice producing population has consistently maintained a much lower level of production. There isn't much doubt that an active FFP Chapter, whose members would make it their objective to help educate the present farmers concerning the more recent developments in rice production, could help to correct this and other educational problems.

To my mind we should thank our lucky stars for the Future Farmers of America. We should not underestimate the value of the FFA in the development of our present or future agricultural welfare. At the same time we should take note of the role it can play in the agricultural development of countries like the Philippines. If the FFA can help America (in a small but significant way) become the most developed country in the world today, it can help other free nations achieve similar results.

We need to extend the FFA hand of friendship to countries like the Philippines. Why can't some of our FFA Chapters affiliate with some of the FFP Chapters to encourage their development and help them enjoy benefits we have enjoyed for years? Such long range programs can do a great deal of good toward promoting international understanding and broadening the purposes and the outlook of the FFA. □

* Dr. Love is completing his second year in the Philippines as Vocational Educationalist in Agriculture under a contract with Stanford University and the International Cooperation Administration.

Evaluating Student-Teaching Experiences

Some suggestions for improving the student-teaching program

JAMES W. WILLIAMS, Director of Agriculture and Supervising Teacher in Agriculture, San Luis Obispo Senior High School, California

James W. Williams

WHAT do teachers think of their student-teaching experiences, once they get on the job? Do they believe they received, as beginning teachers, enough training in teaching pupils, in organizing themselves and their jobs and in conducting a program of vocational agriculture?

To find an answer to these kinds of questions, a survey of a selected number of employed teachers was made by the writer, in the spring of 1956, as a graduate problem in agricultural education at California State Polytechnic College.

Purpose

The primary purpose of the survey was to obtain from teachers their opinions as to the adequacy of the activities in which they participated as student teachers as preparation for teaching vocational agriculture.

Scope and Procedure

Sixty of the two hundred and fourteen teachers trained at California State Polytechnic College since July, 1946, were selected for the survey. Selections were made so that each high school cooperating with the teacher-training institution as a training center was represented by men who did their student teaching in that center. Forty-six responses were received and tabulated.

The Questionnaire

The questionnaire contained sixty-one training activities or professional abilities grouped into six major areas—

1. Organizing, administering and maintaining a department.
2. Agricultural classroom teaching.
3. Teaching farm mechanics.
4. Advising an FFA Chapter.
5. Supervising farming programs.
6. Getting established in the school and community.

The teachers were asked to rate each of the items as Superior, Above Average, Average, Improvement Desirable or Improvement Urgent.

In addition, the teachers were asked to give an over-all evaluation of their student-teacher experiences by answering the following questions:

1. What experiences do you recall which you feel contributed most in preparing you for the job of teaching vocational agriculture?
2. What would you like to see improved? That is, what do you feel should be changed, added to, eliminated, in order to improve the experiences which you received in the training center?

Findings

In general, the teachers rated the adequacy of their training experiences in the six major areas of vocational agriculture teaching in the following order:

1. Agricultural classroom teaching.
2. Organizing, administering and maintaining a department.
3. Getting established in the school and community.
4. Supervising farming programs.
5. Advising an FFA Chapter.
6. Teaching farm mechanics.

The responses are tabulated in the following tables. It should be noted that all teachers did not rate each item, in all cases.

Conclusions

This survey brings into focus what a selected group of vocational agriculture teachers think of their experiences in student teaching. In light of the way they rated their experience in the training centers, the following conclusions may be drawn:

1. The majority of the teachers believed their experiences in organizing, administering and maintaining a department were above average. Two items should receive more attention, however—"Enrolling New Students" and "Working with Advisory Committees."
2. A majority of the teachers rated their experiences in agricultural classroom teaching as average, or above.
3. A representative number of teachers indicated that improvement would have been desirable in experiences in teaching farm

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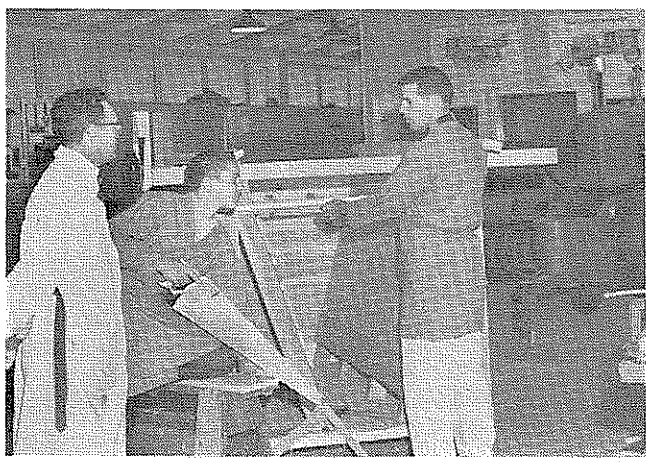
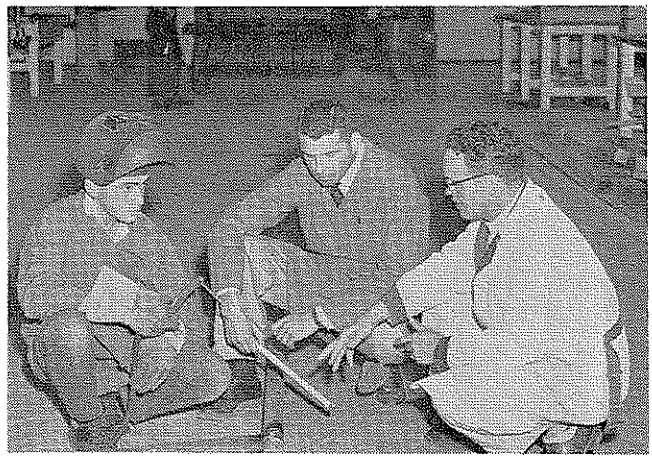


Left to right — Supervising Teacher James Williams, Vo-Ag Student Jimmy Spreafico, and Cadet Teacher Vance Baldwin.
Here we see the cadet teacher being introduced to some of the problems with students' farm mechanic's projects, as the supervising teacher observes his planning with one of the Vo-Ag students.



Left to right—Student Robert Sherwood, Cadet Teacher Carlo Zuniga, and Supervising Teacher James Williams.
Here we see the cadet teacher being oriented about Agricultural Mechanic's project, as the supervising teacher discusses a problem with one of Vo-Ag students.

Evaluating Student - - -

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mechanics, especially with these items:

A. Ordering, accounting, inventorying and maintaining supplies and equipment.

B. Supervising home projects in agricultural mechanics—identifying, discovering and planning.

C. Developing a workable system, with students, of using tools and supplies.

D. Developing home farm shops.

E. Developing a workable system of shop clean-up.

F. Evaluating instruction — observing or developing a system of grading agricultural mechanics.

4. The majority of teachers indicated that their experiences in working with and participating in the FFA program were at least above average. "Promoting FFA Work" was rated as superior by fifteen teachers. It was indicated that more work needs to be done with student teachers in "Securing and Preparing FFA Scholarships."

5. A majority of teachers rated their experiences in the area of supervising farming programs as above average or superior. Their experiences in "Supervising Projects" received a high rating. They indicated that more attention should be given the item "Establishing Successful Farming Programs."

6. A majority of the teachers rated their experiences in "Getting Established in the School and Community" as above average, or superior.

The responses to the two general questions were difficult to summarize. A majority of the teachers mentioned the opportunity to take over the entire department for a period of time as the highlight of their student-teaching period. No particular pattern was evident in the many responses to the

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RATING

TABLE I

Organizing, Administering and Maintaining a Department

	Superior	Above average	Average	Improvement needed	Improvement urgent
1. Budgeting Time	6	16	16	8	0
2. Planning Department Objectives and Goals	4	15	12	12	2
3. Planning the Course of Study	4	18	15	8	1
4. Instructional Materials and Records	8	16	14	7	1
5. Classroom and Shop Layout	7	17	9	13	0
6. Secretarial Assistance	11	13	7	13	2
7. Handling Funds	10	7	15	11	3
8. Securing and Using Transportation	17	15	10	4	0
9. Enrolling New Students	4	6	14	14	8
10. Working Out Vo-Ag Class Schedules	7	9	19	10	1
11. Working with Advisory Committees	2	4	8	13	8

RATING

TABLE II

Agricultural Classroom Teaching

	Superior	Above average	Average	Improvement needed	Improvement urgent
1. Class Teaching Assignments	12	10	13	7	2
2. Observation of Other Teachers	11	13	14	4	2
3. Course Outlines and Teaching Plans	11	10	17	4	2
4. Lesson Plans, Assistance Received	11	11	12	8	2
5. Teaching Materials Available	20	13	6	5	0
6. Teaching Methods	21	17	3	3	0
7. Class Management and Discipline	18	18	5	2	1
8. Evaluation of Instruction	22	7	10	4	1
9. Diagnosis of Difficulties	20	8	7	9	0

RATING

TABLE III

Teaching Farm Mechanics

	Superior	Above average	Average	Improvement needed	Improvement urgent
1. Course Outlines and Teaching Plans	8	12	14	10	1
2. Lesson Planning and Demonstrations	10	9	15	8	3
3. Correlating Instruction	7	8	15	10	5
4. Shop Clean-Up	11	11	8	12	3
5. Tools and Supplies, Workable System	5	12	8	18	2
6. Shop Conduct and Safety	9	11	11	8	1
7. Supplies and Equipment, Ordering, Inventorying, Accounting and Maintaining	4	7	11	18	5
8. Exhibits and Displays	9	11	17	5	1
9. Evaluating Instruction	6	10	16	11	2
10. Developing Home Farm Shop	1	5	15	12	12
11. Supervising Home Projects in Agr. Mech.	1	8	8	20	8

RATING

TABLE IV

Advising an FFA Chapter

	Superior	Above average	Average	Improvement needed	Improvement urgent
1. Promoting FFA Work	17	9	10	7	1
2. FFA Program of Work	10	10	13	9	1
3. FFA Officers and Committees, Assisting in Directing Their Work	11	9	15	7	2
4. FFA Meetings, Planning and Conducting	10	10	14	9	0
5. Leadership Training	10	9	17	7	1
6. FFA Activities	17	9	10	8	0
7. Fairs and Shows	10	14	16	4	0
8. FFA Contests	6	19	14	5	0
9. FFA Reports and Records	2	16	18	6	2
10. FFA Degrees	8	10	19	5	0
11. FFA Scholarships	2	4	20	15	2
12. FFA Supplies and Equipment	10	11	16	6	0
13. Evaluating the FFA	19	10	22	2	1

RATING

TABLE V

Supervising Farming Programs

	Superior	Above average	Average	Improvement needed	Improvement urgent
1. Selecting Projects	11	11	15	5	3
2. Financing Projects	9	13	15	5	3
3. Budgeting	6	12	16	9	2
4. Marketing Possibilities	4	13	18	7	4
5. Supervising Projects	15	13	8	9	1
6. Establising Successful Farming Programs	7	11	11	12	5
7. Improving Practices and Methods	3	10	20	9	4
8. Keeping Farm Account Books	6	15	14	9	2
9. Project Analysis	2	11	18	11	2

RATING

TABLE VI

Getting Established in the School and Community

	Superior	Above average	Average	Improvement needed	Improvement urgent
1. Educational Philosophy	6	9	18	8	3
2. School Policies	9	14	13	4	4
3. Other Faculty Members and Non-Certificated Personnel	12	15	13	4	0
4. Administration	12	21	8	3	0
5. Integrating the Vo-Ag Program	11	13	10	9	1
6. Community Relations	11	12	16	4	1
7. Promoting & Publicizing the Department	14	8	13	7	2
8. Working with Community Organizations	14	7	14	6	3

Effective action is based on knowledge - - -

Measuring Understanding

LEON J. ALGER, Vo-Ag Instructor, Mason, Michigan

Leon J. Alger

IN planning a sound public relations program for a department of vocational agriculture, the teacher needs to know which parts of the program are least understood. In order to determine this he must first consider the various groups of people that are important in the public relations program. The most important persons are the student and his parents. In addition to these people, business men in the community, other farmers, and fellow teachers should have an understanding of the vocational agriculture program.

In a new vocational agriculture program, such as at Mason, Michigan, a part of the first annual evaluation included a measure of the degree of understanding which other teachers in the high school and businessmen in the community had concerning the vocational agriculture program.

What Businessmen Think About the Vo-Ag Program

There were a number of areas in which an attempt was made to determine the understanding that these two groups had. These areas were: (a) farm mechanics, (b) adult and young-farmer education, (c) on-the-farm instruction, (d) FFA, and (e) instruction for part-time farmers. In addition to these general areas, several items relating to intra-school relationships were asked of the teachers.

In order to determine the understanding of businessmen, a questionnaire was prepared and administered to one of the local service clubs. Five questions were developed to cover the five areas mentioned above. It was necessary to prepare the questionnaire in such a way that it could be quickly answered. The five questions asked were:

1. How important do you think farm mechanics instruction is to the training of farmers?
2. What responsibility does the school have to provide vocational agriculture training for part-time farmers?
3. How important do you think it is to train farm boys in rural leadership?
4. What responsibility does the school have to provide adult education in vocational agriculture?
5. How important do you think it is to provide on-farm instruction for vocational agriculture students?

To each of these questions a choice of three answers was provided. The possible answers were: (a) essential or essential to provide depending on the wording of the question, (b) important but not essential, and (c) not necessary to teach or should not provide depending again on the question. Participants were required to merely check the answer of their choice. Thirty-six business and professional men answered the questionnaires. The results are shown in Table I.

What High School Teachers and Administrators Think About the Vo-Ag Program

The questionnaire prepared to measure understanding on the part of high school teachers and administrators was constructed to allow free response. This type of answer was desired in order to avoid any suggestion of "correct" answers.

TABLE I. The Value of Different Phases of the Vocational Agriculture Program As Seen by Businessmen

Question	*Response*		
	Essential	*Important but not essential*	*Not necessary or should not teach*
1. Farm mechanics	30	6	0
2. Part-time farmers	5	24	7
3. Rural leadership (FFA)	32	3	1
4. Adult & Y. F. education	7	22	7
5. On-farm instruction	21	13	2

The questions asked in this questionnaire were:

1. The purpose of the vocational agriculture course is to meet the needs of what group(s) of students?
2. What other responsibilities are required of the vocational agriculture teacher in addition to those required of all teachers?
3. What would you say the Future Farmers of Amercia organization is and what is its purpose?
4. What do you think is the purpose of requiring students to carry farming programs (projects)?
5. Do you feel you have enough information about the vocational agriculture program?
6. What are the responsibilities and duties of the vocational agriculture teacher during the summer months?
7. What is the philosophy behind taking field trips in vocational agriculture?
8. Please make any further comments you care to, either favorable or unfavorable, about the program.

Space does not permit printing all of the answers secured. As an illustration of typical answers given that indicate an understanding, we might look at one of the answers given for the question dealing with the FFA. One answer was "developing leadership in rural America." This would indicate fairly good understanding. Another answer to this question was "I don't know, except possibly to encourage boys in the agricultural field." This answer of course would indicate a lack of adequate understanding.

Summary

A survey or questionnaire is valueless unless the information secured results in action. Information that indicates the degree of understanding which various groups within the community have should be transferred into an action program of public relations. For instance, newspaper articles could be prepared that would explain the purpose and value of such things as adult and young-farmer training and on-farm instruction. The FFA chapter could present various programs explaining their organization to service clubs.

As far as teachers and administra-

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A teacher answers the question - - -

How Shall We Grade?

GUY A. STOCKDALE, Vo-Ag
Instructor, Gilbert, Iowa

Guy A. Stockdale

EVALUATING student accomplishment, or grading, is one of those traditional duties from which there seems to be no escape. How best to do it is a problem confronting all teachers.

Years ago grading was done on a percentage basis. One pupil might get 86 and another 87. Where is the teacher who can determine a 1/100 differential between two students? In an effort to get away from this the A, B, C, D lettering system came into use with the explanation that C represented 80 to 88 or B, 89 to 94, thus keeping the old percentage idea right there in a teacher's mind.

Letter grading accomplishes its intended purpose only when we divest our minds of the percentage idea. C, or average accomplishment, may well represent what the teacher feels he has a reasonable right to expect from the majority of his students. Those who do more or do it better should get a B. And only those doing superior work, who go well beyond the expected or the required, deserve an A. Those who just "get by" but whom we can hardly flunk are D students. I do not think we should hesitate to use the F. Too many pupils in our high schools are being passed because it is the custom, not because they deserve the honor.

An allied idea is that of "grading on the curve." I once had a class of six seniors with one average and the rest definitely above average. Another class of eighteen included seven superior students. In eighteen years teaching vocational agriculture, I have also had classes quite the opposite—with no A's. The curve may sometimes be too arbitrary.

In recent years teachers, particularly in vocational agriculture, have been developing point systems. Some of these total 100, which seems to me to be unfortunate because of the easy association with that old percentage thing of forty years ago. Although it is improbable that any two of these plans will be just alike, there does seem to be some area of rather general agreement—that about 4/10 of the total points should be for supervised farming and that FFA activity should be considered as well as classroom and shop activity.

The following system is not perfect. It is based upon 4 points for A, 3 for B, 2 for C and 1 for D. Double points are given for the application of approved practices which seems to me to be the most important matter in our work. Probably, in many situations, something could well be used in place of "carefulness and neatness" which does seem to fit my present group.

Daily work (classroom or shop) 4/10		
Attitude, interest, cooperation	4	
Understanding, initiative, participation	4	
Carefulness and neatness	4	
Notebooks (or completed shop jobs)	4	16
Tests 1/10		4
FFA—participation and interest 1/10		4
Supervised farming 4/10		
Scope, planning, expansion from year to year	4	
Application of approved practices	8	
Records, completeness and accuracy	4	16
Total		40

35-40	A	19-29	C
30-34	B	13-18	D

After all, any grading system represents the teacher's evaluation of the student's accomplishments. No system is perfect. The above does work. □

Chickens Coming - - -

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action. Evaluations should be regular, not sporadic.

What happens when a satisfactory process of evaluation is employed? Contrary to the fears of many teachers of agriculture, the teacher is one of the chief beneficiaries of evaluation carried on by representatives of the public. The process reveals the good things the teachers have been doing. It shows how the teachers are handicapped by lack of community support and failure to provide the conditions under which they could do their best work. The teachers are taken "off the spot," not put on it. Opening all of their affairs to the public leads to public confidence, lost when they seem to be trying to conceal what they are doing.

Perhaps the current discussions by persons outside our field of the future of agricultural education will make us realize that the final decisions about our field are not ours to make and will lead us to encourage fair and full evaluations by adequate representatives of the public. Far less danger is involved in a systematic arrangement for public evaluation than in risking the shifting winds of rumor and opinion to blow us toward some destination which neither we nor the public in our right minds would have sought. □

From the Editor's Desk - - -

(Continued from page 243)

predecessor to keep resource materials up-to-date. The exposure of the situation comes when administration and school board willingly provide almost unlimited funds for purchasing new instructional materials.

6. *Completeness of program*—young and adult farmer work (and advisory committees, in some states) are commonly accepted as parts of a complete program of vocational education in agriculture for a community. Working with these groups is important for developing lasting favorable impressions.

As professional people, most teachers want to be well thought of in the communities where they have taught. While most vocational agriculture teachers have made enviable records, perhaps there is a place for some periodic soul searching regarding the six sensitive items listed above. In this way, we may be able to insure for ourselves a small share of the greatest reward man has yet devised for a job well done—the esteem of his fellow man. □

Evaluating Student - - -

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question of what they would like to see improved; the responses pretty well coincided with their rating of the individual items in the questionnaire.

From the standpoint of the teacher-training staff and supervising teachers, this study would indicate that the student-teaching activities planned for and experienced by these teachers adequately prepared them as beginning teachers. It also draws attention to specific items, and to one particular area – Teaching Farm Mechanics – which will need further attention and improvement. □

Occupational Establishment of Individuals Who Have the State Farmer Degree

E. E. CLANIN, Teacher Education, Purdue University

The writer has pondered on occasion as to whether the figures which have been reported by many research persons concerning the occupational choice and occupational establishment of former vocational agriculture students might not be heavily "colored" by the factors which are often grouped together under the general heading "lack of opportunity." While analyzing the data from a current research study,[1] the writer has begun to wonder if the proportion of the "outstanding" vocational agriculture students in the study, who have established themselves in farming and closely related agricultural occupations,[2] were not markedly higher than the proportion similarly determined in other research reports. The data were analyzed with this question in mind, therefore, "Do a larger percentage of former vocational agriculture students who hold the State Farmer Degree go into farming and closely related agricultural occupations than the average of all former vocational agriculture students?"

Procedures

The questionnaire which was used to collect data concerning the present and past occupations of the former vocational agriculture students who had been awarded the State Farmer Degree was sent to all of the individuals who had received the degree during the first twenty-five years of the Indiana Association of Future Farmers of America, namely 1929-1953 inclusive. There were 859 individuals in the original list and 629 usable questionnaires were returned. Twenty-three of those not returned were explained because they were deceased or no address could be obtained for them. They had moved from the original community without leaving a forwarding address and subsequent questioning in the community by the present vocational agriculture teacher did not reveal their present address. Of those for whom addresses were available, therefore, usable questionnaires were received from 629 of the 836 or about 75.2 per cent.

Findings

The subsequent analysis of the present occupations reported by the respondents reveals the figures given in Table 1. It is apparent from this table that a higher percentage of those who received the State Farmer Degree during the first fifteen years of the period studied were employed in farming and closely related agricultural occupations than were those of the most recent ten years studied. The actual growth of the Indiana State Association of FFA is also indicated by the larger number of degrees attained in the more recent years.

Anyone who has been working in the field of agriculture education and/or the area of guidance would likely conclude that the smaller number of persons reported as engaged in farming and closely related agricultural occupations is probably due, in part, to such factors as the following: (1) a trend toward fewer persons engaged in farming, (2) a greater number of students going to college, (3) a lengthened period of time necessary to obtain adequate capital to farm, and (4) a period of service in the armed forces. (The last has been required of almost all young men during this period).

To partially aid in understanding the possible impact of items (2) and (4) above, the writer has prepared Table 2 which shows the number of young men actually reported only as college students, those who were attending agricultural colleges, and those who were in the armed forces at the time of the questionnaire.

It is readily seen that an appreciable number of the individuals from the most recent period are in no occupation other than the student in college status and that almost two-thirds of such individuals will probably eventually be added to those who are either in the occupation of farming or a closely related agricultural occupation because they are studying in one of the subject matter areas of an agricultural college.

Likewise, it may well be argued that an appreciable number of those reported as serving in the armed forces will eventually become established in farming or a closely related agricultural occupation. A number of the individuals in the last ten years have already completed their service in the armed forces. A type of analysis of this group is given in Table 3.

It would seem from the data available that, of those individuals who farm at some time, a relatively small group return from the armed forces and do not farm soon thereafter. The writer knows that this sample is relatively small and the trend probably not conclusive, but it seems logical to suppose that many of the individuals (95) who are now in service (see Table 2) will return to farming because 63 of these individuals were reported as farming or in closely related occupations before going into the armed forces and 23 others left an

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TABLE 1. Occupations Engaged in by Individuals in the Sample Population at the Time of Filling the Questionnaire (April 1954 to February 1955)

	Year State Farmer Degree Was Awarded				
	1929-38	*1939-43*	*1944-48*	*1949-53*	*Total*
Number of Degrees Awarded	97	67	167	528	859
Total Number of Persons Responding	69	52	119	389	629
A. Total Farming	43	35	60	167	305
Per cent of Respondents Farming	62.3	67.3	50.4	42.9	48.5
B. Respondents in Closely Related Agricultural Occupations	10	8	11	30	59
Per cent in Closely Related Agricultural Occupations	14.4	15.4	9.2	7.9	9.4
Total A and B—Number	53	43	71	198	364
Per cent	76.8	82.7	59.7	50.9	57.9

[1] "A Study of the Achievement of a Selected Group of Vocational Agriculture Students"—study now in progress by the author but not completed in written form.

[2] In this paper the term "closely related agricultural occupations" will always be used to designate occupations of an agricultural nature for which actual farming experience is usually a desirable pre-requisite—such as vocational agriculture teacher, county agricultural extension agent, hatcheryman, feed dealer, elevator man, etc.

Occupational Estab. - - -

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agricultural college to go directly into such service. It would seem that several of these might also enter farming or closely related agricultural occupations after returning from service.

Conclusions

The reader may wish to compare the data here recorded with data from his own community or state or with other research data.[3] Such data have been collected to point out the educational gain or loss from the general objective of vocational education in agriculture, namely, to prepare the individual for proficiency in farming. The writer believes that in the data here presented, however, he has some proof that the more carefully selected students in vocational agriculture, as evidenced by their attainment of the State Farmer Degree, are becoming established in farming or are entering closely related agricultural occupations in above average proportions as compared to the total population of vocational agricultural students. These students, of course, have had ample opportunity to develop strong supervised farming programs and progress toward establishment in farming while yet in high school and perhaps should have been expected to succeed in achieving farming status if they wished to do so. It is the author's belief that the data here presented point in the general direction of more careful guidance into vocational agriculture classes of those individuals who have the opportunity to become farmers and whose farming programs show some of the benefits from carefully planned, comprehensive supervised farming programs as an aid toward ultimate establishment. A future article will present data concerning the patterns followed toward establishment in farming by the individuals of this study who are now farming. □

[3] See Hamlin, H. M. and Ekstrom, G. F., "Occupations of Former High School Students of Vocational Agriculture," a Digest of Data from Studies Reported in *Summaries of Studies in Agricultural Education* (U.S. Office of Education), Supplements 3 to 10, 1950 to 1957.

TABLE 2. An Analysis of the Status of Individuals Who Have Not Established Themselves in an Occupation (To Date of Questionnaire)

Year State Farmer Degree Was Obtained	*Number Enrolled in College*	*Number Enrolled in an Agricultural College*	*Per cent of College Students in an Agricultural College*	*Number in Armed Forces*	*Per cent Of Total in Armed Forces*
1929-1938	0	0	———	0	———
1938-1943	0	0	———	2	3.9
1944-1948	3	1	33.3	22	18.5
1948-1953	44	30	70.5	71	18.3
Total	47	31	66.0	95	15.1

TABLE 3. A Comparative Analysis of Those Individuals Who Were in the Armed Forces Who Have Farmed at Some Time Since Receiving the State Farmer Degree

Year State Farmer Degree Was Obtained	*Number Who Have Completed Service in the Armed Forces*	*Number Who Farmed Both Before and After Service*	*Number Who Farmed Before But Not After Service*	*Number Who Farmed After But Not Before Service*
1929-1938	6	3	0	3
1939-1943	16	11	1	4
1944-1948	33	22	6	5
1949-1953	12	6	2	4
Total	67	42	9	16

Acquainting Boys With Cameras

A way to better publicity

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

Taking pictures of chapter activities and of the doings of members singly and in groups can be a valuable and challenging experience for boys and teachers. This seems particularly so when boys help make photos of their chapter's programs and of the activities of fellow students under the direction of their teacher of agriculture or someone else competent in photography—the sponsor of the school's camera club, an amateur or a professional photographer, or another teacher.

Boys so supervised and assisted seem not only to gain skills in picture making per se, but also seem to grow more competent in selecting photos for publicizing chapter work via such media as television, newspapers, magazines and exhibits where illustrative materials can enhance the presentation.

Pictures taken by boys will usually vary from simple snapshots to elaborate photos, depending on the kinds of cameras used. Many of the pictures will not be good—at least until boys learn to master their equipment. But when put in a collection, the good ones ofttimes tell the chapter's story more vividly and meaningfully than photos made by the teacher alone. Boys sometimes have the opportunity to make dramatic and revealing pictures of farming operations that the teacher, working with a large number of youths, has not the chance to take.

Sources of Information

To take good pictures, boys need assistance with many problems. Some follow:

1. What are some of the sources of free and/or inexpensive materials on picture making?
2. What kind of cameras to buy?
3. How to get the most out of a camera?
4. What types of photos are needed for publicizing chapter activities?

There are many sources of free and/or inexpensive information on photography. Some follow:

1. Eastman Kodak Co., *It's a Snap*, Rochester, N. Y.
2. Eastman Kodak Co., *Picture Tak-*

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Progress of Agricultural Education in Iraq

An Evaluation of a Foreign Assignment

J. H. LINTNER, Advisor, Vocational Agriculture, U. S. Operations Mission to Iraq

J. H. Lintner

"What can be accomplished in a two-years tour of foreign service with the International Cooperation Administration serving as advisor in Agriculture Education?" This was the question which confronted me before leaving for Iraq in February, 1956. After one year, the answer seems obvious that it will be much less than hoped for but still as much or more than could justifiably be expected. Since no annual report is expected by either the Minister of Education or I.C.A., the following evaluation is self-imposed.

Objectives of Assignment

Any evaluation should be made in terms of objectives but the question which has continually arisen is, "Whose objectives?" Those of the United States Government and the Government of Iraq may generally be the same; those of the Ministry of Education and the U.S.O.M./Iraq may be similar; but the individuals who do the implementation may understandably be influenced by personal considerations which vary from time to time. Rather than to go further into these ramifications, it seemed to me that the one over-all objective which every one would agree upon was to prepare rural youth to operate units of reclaimed government land as self-proprietors capable of making a satisfactory living for their families and eventually develop a middle class society where one does not presently exist. This has been the concept on which planning has proceeded and, perforce, will be used in the preliminary evaluation of my first year in Iraq.

My evaluation seems to fall logically into three categories:

1. Things accepted or reasonably well accomplished.
2. Things not accepted and therefore not accomplished.
3. Things probably accepted by progress yet to be determined.

Some background as to the Agriculture and Education in Iraq is probably necessary for proper understanding of this appraisal and is presented briefly at the outset.

The Current Agricultural and Educational Situation

Although a small country about the size of California, Iraq is unique in the Middle East in having plenty of land for agriculture, adequate national income from oil, sufficient water for storage in the North and two great rivers to distribute it for irrigation in the South. The threat of periodic floods has disappeared with the completion of flood control structures, and increasing areas of land will become available when the major dams now under construction are ready to impound the water which is presently being wasted.

There are no population pressures and the demand for even unskilled workers in metropolitan areas has increased earning power. Inflation caused by increased spending is a growing problem.

With 70% of the revenue from oil allocated to a Development Board for long time improvements to benefit all of the public, it would seem that all problems would soon disappear. This fails to take into account that money can bring about physical change much more rapidly than changes in people can be effected.

Many of the problems of Agriculture stem from the system of land tenure. There is no sizable group of middle class farmers and, in many areas, less than 10% of the population either own or control 90% of the land. This feudal system with absentee land lords has depended largely on grain farming, and the primitive farming methods are producing ever decreasing yields. With little hope of improved living standards, farm workers are migrating to the cities where wages are much better. The land owners are turning to mechanization to get the work done, but machines require trained operators who can make higher wages in construction work.

The government land, when distributed to city dwellers or untrained rural people, soon becomes waterlogged and salinization causes eventual abandonment. The extension and advisory service to adult farmers seem ineffectual in developing competent operators to make proper use of the land and water. It is apparent that agricultural education should start in the formative years of secondary school so that as the major dams are completed and more land made available, there will be trained young men ready to properly operate the individual units of land in the areas known as Miri Sirf projects. This land was once fertile and, when water is supplied by irrigation, it will produce very satisfactoy crops without fertilizer. Lime is unnecessary and much of the country can raise two crops a year although not on the same land, as this would hasten salinization.

Iraq is a young country. The educational system has been geared largely to the production of Government workers, since the administration and service functions were previously performed by outsiders under the Ottoman regime. Now that the demands of the Government have largely been taken care of, there is potential unrest since there are a number of students who take academic courses but have difficulty in finding employment as "White Collar" workers.

There is no need for a compulsory school law as there are more voluntary pupils than can be handled with the existing teacher supply or accommodated in available buildings. Education is free at all levels and, except in isolated areas, both students and parents want to take advantage of this opportunity. Following six years of Primary and three years of Intermediate school, a student may specialize in the last two years in either a scientific or literary curriculum. Graduates from the former become doctors, engineers or Government officials in Agriculture following college training; while the latter even-

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Progress of - - -

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tually end up as lawyers or teachers in the secondary school.

All classes in both primary and secondary schools are academic; learning consists largely of rote memorization in anticipation of government examinations.

The need for diversification in education is recognized in every survey report made by major educators and is currently recognized by the Iraqi officials. The first step in this direction is to be the establishment of Vocational Technical and Agricultural Schools with the latter prompting my recruitment for a two-year tour.

Following study of previous surveys and familiarization with the country and facilities available, a complete report was produced as a basis for operations. This report has been considered by high officials in the Ministry of Education acting as an Education Council and it is understandable that certain aspects were readily agreed upon, others definitely rejected and much on which no action has yet been taken.

Things Which Have Been Accomplished

1. *Three schools are in operation at Baqouba, Mosul and Ramadi with five teachers and 100 students.*

Since there is no tradition of Vocational Agriculture in Iraq and a very limited number of administrators, teachers or parents with any concept of what could be accomplished, it was necessary to get some schools started using improvised facilities and untrained teachers while permanent building and teacher-training programs were developed. These three schools provide something for people to look at, which is much better than telling them what Vocational Agriculture is like in the United States or what it might be like in Iraq. They enable teachers and administrators to gradually solve problems which can be predicted by outsiders but not realized by Iraqis until they are experienced. They also permit a testing on a limited scale during the first year before expansion in the ensuing years.

2. *The concept of individual farming programs or projects with students having managerial responsibility and financial participation has been accepted.*

This basis will be used by students in operating the school farm and will be a major factor in determining whether a student passes or fails in a year's work.

3. *There will be no dichotomy between theoretical and practical work or lecture and laboratory.*

The teacher will have two double periods each day to use as he sees fit to accomplish the objective by class discussion, work in the farm shop, demonstration, field trips or any combination of methods in varying proportions.

4. *Shop work will be on an integrated basis with additional time available for individual work in the farm shop during the students free time on a voluntary basis but with teacher supervision or consultation.*

5. *Students are selected largely on the evidence of their desire to make farming their life's work with only minor weighting given to grades achieved in the Primary School.*

Sons of farmers are given preference but family farms for project work are not required.

6. *Teachers must be graduates of the four year College of Agriculture and be willing to engage in everyday farming operations as well as participate in work shops and on-the-job training.*

Many of the college students have had little participation experience in farming before entering college and only limited experience prior to graduation. However, they are generally anxious to improve their ability and the use of "demonstrators" or assistant teachers is not contemplated.

7. *Teacher-Training courses are provided in the College of Agriculture.*

Initially, these classes are taught by the Agricultural Education Advisor. The general policy for Vocational Agriculture will be determined by the Ministry of Education when Iraqi educators take over the handling of the classes.

8. *A complete set of farm machinery, equipment and tools is already purchased for the six additional schools that are planned for opening in 1957, with money obtainable for additional schools as necessary.*

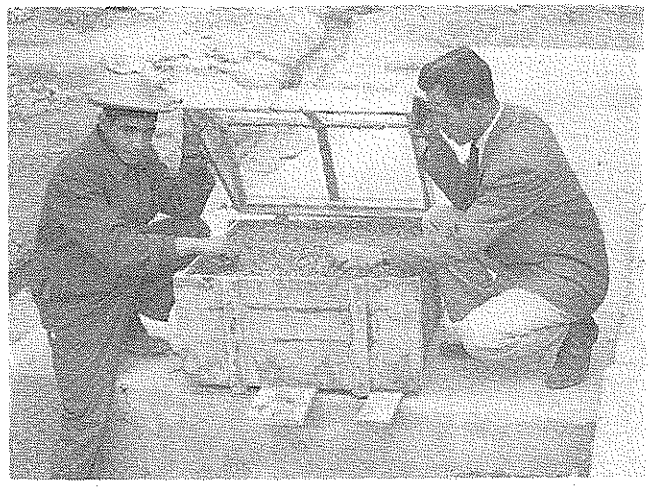
Things Not Accepted and Therefore Not Accomplished

1. *The proposal that Vocational Agriculture departments might be added to and integrated with academic secondary schools now in operation was not accepted.*

The advantage of living at home

(Continued on page 256)

A Vocational Agriculture Student at Baqouba irrigates the land previously prepared for spring planting of vegetables.



Khazal Latif, Teacher of Vocational Agriculture at Baqouba and one of his students inspect the tomato seedlings being started in the homemade "cold frame" for later use on the school farm.

Progress of - - -

(Continued from page 255)

to enable farm work, including projects, to be conducted within the family group apparently does not outweigh the greater control and higher cost. Personal surveys indicate that one or two teacher departments could be established in a limited number of schools irrespective of the present condition of the roads. As transportation facilities improve in the next decade, there would seem to be little reason for expanding the frame work beyond one 200-student Boarding School in each Liwa (state) but whether there will be any change in the present direction that only Boarding Schools shall be established is problematical.

2. *The recommendation that the study of English not be compulsory in the three years of Intermediate school for students who plan on going on Miri Sirf units was not favorably considered.*

However, it was recognized that this second language would be of value only with students who went to college or worked in occupations closely related to farming. The concentration on English in the two preparatory years was not acceptable and, for the present, the language requirements in both English and Arabic will be rigidly applied regardless of need following completion of school.

Things Probably Accepted But Accomplishment Yet to Be Determined

1. *The concept that a Vocational Agriculture teacher is a "generalist" and can team Farm Mechanics and Farm Management as well as Agriculture Production.*

Although this has not been rejected, it will be doubly difficult to develop because of the idea of specialization while in college and the current absence of practical courses in farm mechanics and farm management. If in-service training can be provided to upgrade the teachers as fast as this training is needed by the students, it will become permanently established rather than receiving tacit acceptance as presently exists.

2. *The principle that the annual course of instruction will be developed by the teacher on the basis of solving problems growing out of day to day operations on the school or home farm on a seasonal basis.*

Each of the five years will have an emphasis, i.e., crop production, animal production, etc., but they will not be mutually exclusive. Again, acceptance will depend on the degree of in-service training which can be provided to make up for the paucity of pre-service training. This is the first time that the rigid direction from the central authority in the Ministry of Education as to what a teacher is to cover and how it shall be done has been liberalized. The current feeling is that the teachers are not competent to perform this function which is one of the strengths of Vocational Agriculture in the United States.

3. *The idea that parents or others will allow students to carry on farm projects during the summer or in addition to any project opportunities on the school farm; and that such experience would be considered in determining the grade for a year's work.*

While there has been no prohibition of teachers cooperating with voluntary actions by students and parents, the general feeling in the Ministry of Education is that this will happen only in isolated cases. However, information gained by personal survey and during the selection interviews indicate that possibly 10% of the students already own some land in their own right and another 15% or more live on farms of sufficient size so that projects could be conducted without reducing the income needed for the entire family.

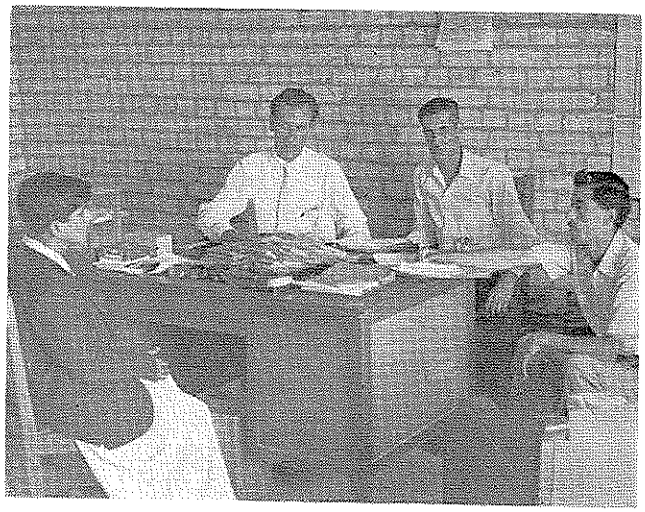
4. *The practice of individual project agreements mutually negotiated between the students and the teachers (representing the Government) for operation of the school farm.*

At the present time all project agreements follow one pattern established by the Ministry and offered the students on a "take it or leave it basis." This may be acceptable for the first year a school operates, but with the addition of livestock some liberalization must take place if students are to develop the managerial ability needed after graduation.

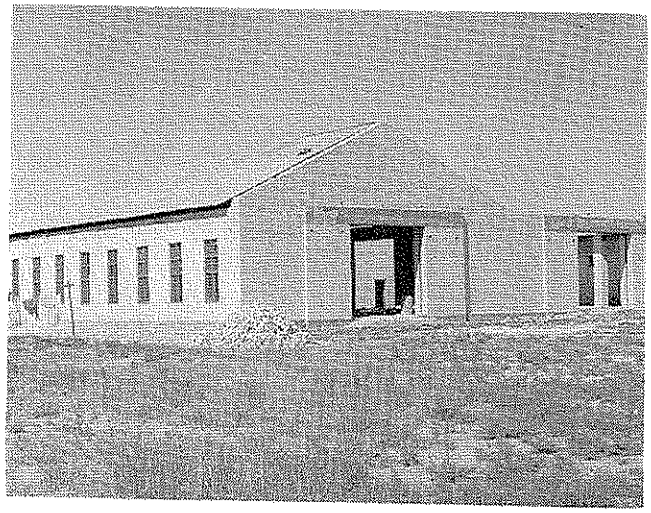
5. *The principle of year-round employment of Vocational Agriculture teachers with pay to reflect the additional work required over that expected from academic teachers.*

The present discrepancies between what is expected of either a Ministry of Agriculture official or a teacher in the Ministry of Education and the

(Continued on page 259)



An applicant for the Vocational Agriculture School at Baqouba is questioned by the Selection Committee composed of the Senior Teacher (left), the Primary School Inspector and the Junior Teacher at the right. The Hatching room of the New Poultry Building is used for a school office.



The Farm Shop Building with the Machinery Compound attached is almost completed at Baqouba, Iraq. The classroom is on the other end of the building. This self-contained unit will provide for 200 students in Vocational Agriculture.

Ralph Bentley

Factors Influencing Agriculture College Students to Choose Their Fields of Specialization*

RALPH R. BENTLEY and PAUL E. HEMP, Teacher Education, Purdue University

Paul E. Hemp

Why did you choose to specialize in agricultural education? Did your parents, a teacher, or some other person influence your choice of a field of specialization? Were the experiences you had before entering college or while attending college related to your choice of agricultural education? Answers to these and other questions are important to workers in agricultural education who are interested in recruiting prospective teachers of agriculture.

A recent study[1] conducted at Purdue University and at the University of Illinois was designed (1) to determine the factors which influenced agriculture college students in choosing their fields of specialization, and (2) to determine whether there were significant differences between various groups of students with respect to the factors which influenced them in choosing their fields of specialization.

The data for this study were obtained from freshmen and senior agriculture college students who responded to 20 selected factors as having influenced them "a great deal," "little," or "not at all" in their choice of a field of specialization.

The percentages of student responses were computed and the significance of the difference between each of the following groups was determined: (1) Purdue freshmen and seniors, (2) Illinois freshmen and seniors, (3) Purdue agricultural education students and other[2] Purdue agriculture college students, and (4) Illinois agricultural education students and other[2] Illinois agriculture college students.

Table I shows the number of students by groups and the percentage who indicated that they were influenced "a great deal" or "little" by each of the twenty factors.

The percentages shown in Section A of Table I indicate that persons influencing the most students in their choices of fields of specialization were fathers, mothers, friends and teachers of agriculture. Next in importance in terms of numbers of students influenced were relatives, county agents, college professors, high school principals and teachers other than agriculture. Less than one-third of the students indicated that they were influenced by college guidance workers, high school guidance workers and superintendents of schools.

The vocational factors shown in Section B of Table I which influenced most students in their choice of a field of specialization were "Economic advantages of the occupation," "Opportunity for employment," "Employment before entering college" and "Social advantages of the job."

Section C of Table I shows the percentages of students who were influenced in their choice of a field of specialization by three miscellaneous factors. Approximately three-fourths of the students indicated that they were influenced by reading agriculture books or magazines while less than one-half were influenced by "college catalogs and announcements" and "hobbies."

In interpreting the percentages presented in the tables, the reader should not assume that all students have had opportunities to be influenced by all factors. For example, all students have parents but not all have had the opportunity to be influenced by teachers of vocational agriculture.

Year in College

The percentages of freshmen and senior students who indicated that they were influenced "a great deal" or a "little" by each of the twenty factors are shown in Table I. In order

(Continued on page 258)

TABLE I. Factors Influencing Agriculture College Students to Choose Their Fields of Specialization

FACTORS	Year in College: Purdue Freshmen N=411 %	Purdue Senior N=198 %	Illinois Freshmen N=410 %	Illinois Senior N=229 %	Fields of Specialization: Purdue Ag.Ed. N=131 %	Purdue Other** N=287 %	Illinois Ag.Ed. N=95 %	Illinois Other** N=354 %
A. PERSONS:								
1. Father	74	61	72	64	71	72	75	72
2. Mother	65	51	65	60	67	60	75	77
3. Friend	55	49	53	53	57	46	61	53
4. Teacher of agriculture	52	39	56	53	71	46	76	56
5. Relative other than	48	37	45	37	39	47	41	45
6. County agent	32	32	21	14	51	31	26	20
7. College or university professor	17	33	15	57	20	20	44	28
8. High school principal	28	23	32	16	49	23	43	26
9. Teacher other than agriculture	30	17	28	19	42	22	39	22
10. Guidance worker in college	15	17	14	32	11	16	30	20
11. Guidance worker in high school	17	11	25	11	12	14	18	20
12. Superintendent of Schools	8	3	14	7	12	4	23	11
B. VOCATIONAL FACTORS:								
13. Economic advantages of the occupation	79	74	75	78	85	80	77	76
14. Opportunity for employment	75	75	72	77	83	73	84	70
15. Employment before entering college	63	63	66	65	61	69	68	69
16. Social advantages of the occupation	56	64	54	72	73	58	76	60
17. Employment while in college	11	38	7	46	22	21	36	18
C. MISCELLANEOUS FACTORS:								
18. Reading agriculture books or magazines	70	74	75	75	75	75	83	77
19. College catalogs and announcements	47	43	42	29	43	49	37	36
20. Hobby	43	36	48	36	31	38	43	43

*These percentages include persons responding "a great deal" or "little" to each of the factors.
**"Other" refers to students majoring in Animal Husbandry, Dairy, Agricultural Economics and General Agriculture.

[1] The study was designed and the data were summarized by Dr. Ralph R. Bentley of Purdue University. The Illinois data were collected by Dr. A. H. Krebs of the University of Illinois.

[2] "Other" refers to students majoring in Animal Husbandry, Dairy, Agricultural Economics, and General Agriculture.

* This is the second in a series of three articles dealing with the occupational choices of agriculture college students. The first article appeared in the April, 1958, issue.

Factors Influencing - - -

(Continued from page 257)

to point out more clearly the significant differences between the responses of these groups and to show the percentage distribution of their responses to factors where significant differences were found, Table II was prepared.

Significant differences between the percentage responses of freshmen and senior students may be observed in Table II. A significantly larger percentage of freshmen than seniors at both universities were influenced by fathers. Furthermore, a significantly larger percentage of Purdue freshmen than seniors were influenced by mothers, teachers of agriculture, relatives other than parents, and teachers other than agriculture. At Illinois, a significantly larger percentage of freshmen than seniors were influenced by high school principals and high school guidance workers.

As one might reasonably expect, a significantly larger percentage of seniors than freshmen at both universities were influenced by college professors and employment while in college. At the University of Illinois, a significantly larger percentage of seniors than freshmen were influenced by college guidance workers and social advantages of the occupation.

Fields of Specialization

In order to show more clearly the significant differences between the responses of agricultural education students and other agricultural college students and to show the percentage distribution of responses to factors where significant differences were found, Table III was prepared.

A significantly larger percentage of agricultural education students than other agriculture college students at both universities were influenced by teachers of agriculture, high school principals, teachers other than agriculture and the social advantages of the occupation. At Purdue, a significantly larger percentage of agricultural education students than other agriculture college students were influenced by county agents. On the other hand, employment before entering college influenced a significantly larger percentage of other agriculture college students. At the University of Illinois, a significantly larger percentage of agricultural education students than other agriculture college students were influenced by superintendents of schools, employment while in college and opportunities for employment. Economic advantages of the occupation influenced a significantly larger percentage of other agriculture college students.

Summary

The findings of this study regarding factors which influenced agriculture college students to choose their fields of specialization may be summarized as follows:

1. Persons influencing the largest percentage of students were

(Continued on page 259)

TABLE II. Factors Which Show Significant Chi-Square Differences When the Responses of Freshmen and Seniors Are Compared

Factor		A[1] %	L[2] %	N[3] %	*Chi-square*
	PURDUE UNIVERSITY				
1. Father	Freshmen	35	39	26	
	Seniors	22	39	39	14.953**
2. Mother	Freshmen	23	42	35	
	Seniors	10	41	49	17.824**
4. Teacher of agriculture	Freshmen	24	28	48	
	Seniors	20	19	61	9.776*
5. Relative other than parent	Freshmen	14	34	52	
	Seniors	15	22	63	9.602*
7. College or university professor	Freshmen	4	13	83	
	Seniors	12	21	67	20.479**
9. Teacher other than agriculture	Freshmen	10	20	70	
	Seniors	8	9	83	14.178**
17. Employment while in college	Freshmen	2	9	89	
	Seniors	16	22	62	68.405**
	UNIVERSITY OF ILLINOIS				
1. Father	Freshmen	36	36	28	
	Seniors	22	42	36	13.946**
7. College or university professor	Freshmen	3	12	85	
	Seniors	18	39	43	128.335**
8. High school principal	Freshmen	8	24	68	
	Seniors	3	13	84	19.196**
10. Guidance worker in college	Freshmen	4	10	86	
	Seniors	7	25	68	29.922**
11. Guidance worker in high school	Freshmen	4	21	75	
	Seniors	4	7	89	21.530**
16. Social advantages of the occupation	Freshmen	23	31	46	
	Seniors	27	45	28	19.284**
17. Employment while in college	Freshmen	1	6	93	
	Seniors	19	27	54	131.967**

1. A great deal 2. Little 3. Not at all
* Chi-square — Difference due to chance less than 1 in 100.
** Chi-square — Difference due to chance less than 1 in 1000.

TABLE III. Factors Which Show Significant Chi-Square Differences When the Responses of Agricultural Education Majors and Other Agriculture Students Are Compared

Factor		A[1] %	L[2] %	N[3] %	*Chi-square*
	PURDUE UNIVERSITY				
4. Teacher of agriculture	Ag. Ed.	43	28	29	
	Others	18	28	54	32.309**
6. County agricultural agent	Ag. Ed.	18	33	49	
	Others	8	23	69	17.860**
8. High school principal	Ag. Ed.	16	33	51	
	Others	5	18	77	28.137**
9. Teacher other than agriculture	Ag. Ed.	20	22	58	
	Others	6	16	78	23.251**
15. Employment before entering college	Ag. Ed.	25	36	39	
	Others	40	29	31	9.237*
16. Social advantages of the occupation	Ag. Ed.	26	47	27	
	Others	18	40	42	10.137*
	UNIVERSITY OF ILLINOIS				
4. Teacher of agriculture	Ag. Ed.	47	29	24	
	Others	29	27	44	14.353**
8. High school principal	Ag. Ed.	13	30	57	
	Others	7	19	74	10.286*
9. Teacher other than agriculture	Ag. Ed.	18	21	61	
	Others	10	12	78	11.116*
12. Superintendent of schools	Ag. Ed.	6	17	77	
	Others	3	8	89	10.379*
13. Economic advantages of the occupation	Ag. Ed.	16	61	23	
	Others	31	45	24	10.380*
14. Opportunity for employment	Ag. Ed.	30	54	16	
	Others	33	37	30	11.682*
16. Social advantages of the occupation	Ag. Ed.	28	48	24	
	Others	26	34	40	9.035*[1]
17. Employment while in college	Ag. Ed.	9	27	64	
	Others	5	13	82	13.752*

1. A great deal 2. Little 3. Not at all
* Chi-square — Difference due to chance less than 1 in 100.
*[1] Closely approximates 9.210, the one percent level of significance.
** Chi-square — Difference due to chance less than 1 in 1000.

Factors Influencing - - -

(Continued from page 258)

fathers, mothers, friends, and teachers of agriculture. Those influencing the smallest percentage of students were college guidance workers, high school guidance workers and superintendents of schools.

2. More students were influenced by teachers of agriculture than by any other professional person.

3. Significantly more Purdue agriculture college students than Illinois agriculture college students were influenced by county agricultural agents.

4. College professors and college guidance workers influenced significantly more Illinois seniors than Purdue seniors.

5. A significantly larger percentage of agricultural education students at Illinois than at Purdue indicated that they were influenced by college professors and college guidance workers.

6. Four of the twenty factors influenced more agricultural education students than other agriculture college students at both Purdue and at Illinois. These were teachers of agriculture, high school principals, teachers other than agriculture, and the social advantages of the occupation.

7. The evidence clearly indicates that recent experiences played an important part in the fields of specialization chosen by agriculture college students. For example, more freshmen than seniors were influenced by such factors as high school teachers, parents and hobbies; whereas more seniors than freshmen were influenced by college professors and college employment.

8. The three factors which influenced the largest percentage of agriculture college students in their choice of a field of specialization were: economic advantages of the occupation, opportunity for employment and reading agricultural books and magazines.

Implications

1. The evidence in this study indicates that significantly more Illinois students than Purdue students were influenced by college professors and college guidance workers. It would seem desirable that the guidance and counseling programs at these institutions be studied and compared.

2. Significantly more agricultural education students than other agriculture college students were influenced by persons in secondary education. This would suggest that persons in secondary education are in a strategic position to recruit desirable persons for specialization in agricultural education.

3. It is apparent from this study that many agricultural college students felt that vocational experiences and opportunities influenced them in choosing their fields of specialization. It would seem that persons interested in recruiting and guiding agriculture college students might well emphasize placement opportunities and give students assistance in securing work experience in the various fields of specialization.

4. This study shows that parents, teachers of agriculture, and reading materials were important factors influencing agriculture college students in choosing their fields of specialization. This indicates the desirability of providing parents, students, teachers of agriculture, and others with appropriate information regarding agricultural occupations.

5. The data in this study clearly show that more agriculture college students at Purdue than Illinois were influenced by county agricultural agents. It would seem desirable that the relationships between county agricultural agents and agriculture college students in Indiana and Illinois be studied and compared. □

Progress of - - -

(Continued from page 256)

work which a good Vocational Agriculture teacher should do must be resolved so that the teacher has an incentive to work longer hours and more months. This issue will be settled before the initial summer of 1957 is completed.

6. *The concept of home visitation for project supervision, counseling of students and parents, improved farm practices, and investigation of applicants prior to enrollment.*

This goes hand in hand with full-year employment and will be tested in the coming summer. The fact that students in Boarding Schools sometimes live 100 or more miles from the school can be solved by the use of the school truck which is a standard piece of equipment in all schools, but transportation or hotel costs will appear formidable. In-service training will be necessary to assist teachers to plan summer work schedules and justify the cost for salary and travel.

7. *Provision for in-service training during the summer time.*

This is absolutely necessary to get the teachers ready for the next year's work which will be entirely different each year, at least until the five year cycle is completed. While generally accepted, there may be objections raised before the summer is over because of the expense of assembling teachers in a central location and paying for living expenses.

8. *The concept that enrollment in Vocational Agriculture does not preclude a student going on to a college of his own choice if he has the necessary academic and intellectual ability.*

While it is anticipated that at least 20% will work in occupations closely related to farming, it is hoped that at least 10% will go on to College. About half of these should attend the College of Agriculture with at least one in every five eventually becoming a teacher of Vocational Agriculture.

While acceptance of the items in category *three* is implied by the action taken by the Education Council, the fact that action or concurrence by other individuals or agencies is necessary will eventually require further consideration. The official regulations, when published, may give additional status to some items but, for many, final acceptance must await a test case.

In retrospect, the year has been interesting and profitable from a self-improvement point of view. Living in Baghdad and traveling over Iraq, even in hot summer, has been more pleasant than anticipated. There is no question that there is much work to be done.

While possibly six more schools will probably be established on the same basis used for the three already in operation, it will take eight to ten years before the projected program of one 200-student Boarding School, each with five teachers of Vocational Agriculture, is in operation in each of the fourteen Liwas. An even longer time will elapse before Vocational Agriculture departments will be integrated into general (non-Boarding) schools. □

One teacher believes that - - -

Young Farmers Are a Challenge to Vo-Ag

WILLIS DI VALL, Vo-Ag Instructor, Winneconne, Wisconsin

Willis Di Vall

THE one thing that apparently drives a goodly number of vocational agriculture instructors out of teaching is my reason for staying in the work—the Young Farmer program.

I am very interested in this program for several reasons. The group between the ages of sixteen and thirty years of age is a very neglected group in our over-all, present day education system in America. The young men are too old for high school education and too young to be accepted into our adult organizations for anything more than their membership dues.

How many times have you heard this statement: "He would make a good officer, but he is too young." It is the one thing that is very discouraging to me as a person who has known these fellows from the "diaper" stage of life to the "Man" stage. I think it is more discouraging to these young men.

Let's keep them in a group and work with them and then watch the influence they have on their communities, the younger and the older group of farmers. Before long you will find that members of, or former members of, the Young Farmer group are officers of your farm organizations, co-ops, service clubs and even of the school board. This situation leaves the vocational agriculture instructor in a very "stable" position in his community and affords good protection from "political" batting that some teachers have to cope with.

Another reason for my interest is that young men of this age have flexible minds. They are ready to accept new ideas. One member of the group is willing to give a new idea a fair trial and give his honest opinion to other members of the group. I do not want you to have the opinion you can get them to do anything and everything because their minds are flexible. They are cautious and very willing to tell you their honest, straight-forward thinking on some of the ideas put forth by experiment stations, magazines, or the instructor.

The honesty with which young farmers deal with each other and the instructor certainly offsets much of the dishonesty we read about in our newspapers and magazines. It makes you firmly believe that there are more good young people in our country than otherwise.

Young Farmers challenge the instructor to be "awake" to the changes in agriculture. They are eager to move on in the agricultural field. The instructor just can't stay in a "rut."

Lastly, the most discouraging part of teaching vocational agriculture is the time an instructor must wait before seeing the results of his work in a community. The time element can be speeded up and results can be realized in a relatively shorter time working with young farmers.

Young Farmers have the ambition to move quickly into new methods. They are young and if the project does not work out with the first attempt, they can start over. I think they are quicker to invest money in farming than an older man because if they meet failure they are young enough to pull themselves together and start anew. The greatest asset young farmers have, in my opinion, is that they believe in themselves and they believe in agriculture.

My methods of instruction are similar to those used in Adult Farmer classes except for one thing, and that is the use of workbooks and notebooks. I was always of the opinion that people beyond high school age didn't care to write or "figure." By accident, I discovered that notebooks made the class more interesting and that the fellows enjoyed writing the conclusions reached to a problem into a workbook or notebook for future reference.

I have used this method for over ten years and it still seems to make the fellows feel they are really going to school and not just to an evening "bull" session.

We read and hear much about vocational agriculture slipping or losing its place in the field of education. We have a very eager, ambitious age group in our communities that vocational agriculture teachers know best and can do the most for so let's not lose them.

In my estimation, vocational agriculture in most communities will remain strong as long as the Young Farmer program remains strong. □

Measuring - - -

(Continued from page 250)

tors are concerned, a number of things could be done to promote better understanding. Perhaps one of the most valuable is to keep in mind the areas in which a lack of understanding is most evident and to emphasize these during informal chats and contacts. As various programs are presented during the school year, (banquets, assemblies, programs for teachers' meetings, etc.), these areas could be kept in mind.

If our vocational agriculture programs are to be effective instruments for the training of farmers and the development of rural leadership, it is necessary to be aware of areas in which the community does not have an adequate understanding. Teachers must be cognizant of the fact that only if people understand what we are trying to do will they support our programs. □

Qualitative - - -

(Continued from page 246)

ing job of which he is capable, can live with himself and rejoice in the great handiwork of helping to build men. He will not become adversely affected by the naked truth and grim warning as expressed by Omar Khayyam in the Rubaiyat,

"The moving finger writes; and having writ,
Moves on; nor all your pity or wit
Shall lure it back to cancel half a line,
Nor all your tears wash out a word of it."

But instead, realizing the good job done, and seeing the seeds he has planted ripen into desirable fruition, he will breathe the fresh pure air of happiness as expressed by Robert Lewis Stevenson,

"Away down the river
A hundred miles or more
There are many little children
Who'll bring my boat ashore." □

Next Month
"The Summer Program"

A marking system that works.

"How am I doing?"

JACOB VENEMA, Vo-Ag Instructor, Blissfield, Mich.

Jacob Venema

MANY of us as teachers have these words from our pupils echo in our ears innumerable times during the year. Formerly I would get out my class record book and say, "According to my class test marks and classroom participation grades you have about an A, B, C, D, or E," whatever the case might be. After the student had gone, I would begin to think, "Am I being fair?"

I require that students have a supervised farming program, and yet, I give them no credit for this work. My FFA members are doing excess work and learning to be leaders, yet they receive no indication for this on their report cards. Another thing that bothers me is the fact that a number of senior students each year carry as a project, one acre of corn, or one steer—the same program they started with as freshmen—showing no growth. Am I teaching them anything or not? Their grades show they have credit in agriculture.

After thinking it over some more and getting a few ideas during the summer months, I decided to ask for the opinions of my students. The first day of school in the fall of 1953 I started this practice. They practically all seemed to be in favor of the idea of using their farming programs and Future Farmer activities as part of the basis for their six week marks.

A Revised System

The answers to systems of evaluation in vocational agriculture are many and varied. What works in one part of the country may not work in another. How could it be done? I got some ideas from various systems I had read about, but most of them were either too long or too complicated. My system had to be simple, easy to apply, and provide for growth of the individual. I wanted it simple so that every student and parent could understand it and know what was to be expected of him. This grading system had to be easy to apply and quick to fill out so that I could have my grades ready in time to mark cards when the six week periods ended. It had to be fair to each individual. I wanted to give credit for actual accomplishment. I tell my students that I don't take anything away from them, but give them credit for what they do. For a person's farming program to grow and lead to establishment in farming there had to be some incentive for him to enlarge his program. The scorecard had to contain some provision for giving credit to the workers in the Future Farmer organization.

By the end of the first semester I came up with the following scorecard:

Application for Six Weeks Grade

Supervised Farming Program (Maximum 30 points)

Productive projects	*Name*	*Scope*	
Freshman (4 points per P.M.W.U.) Sophomore (3 points per P.M.W.U.) Junior (2 points per P.M.W.U.) Senior (1½ points per P.M.W.U.)		(by six wk. periods)	
_____P.M.W.U. times_____ points equals	_____	_____	_____
Improvement projects completed (6 points per project) 1. 2.	_____	_____	_____
Supplementary practices (2 points each) 1. 4. 2. 5. 3. 6.	_____	_____	_____
Other farming program activities (points variable)	_____	_____	_____
Future Farmer Activities (Maximum 15 points)	_____	_____	_____
1. Meetings attended (2 points per)	_____	_____	_____
2. Committee chairman (3 points per)	_____	_____	_____
3. Served on a committee (1 point per) (above committees must have met)	_____	_____	_____
4. Participation in meeting (1 point per)	_____	_____	_____
5. Other FFA activities (points variable) (Radio programs, contests, community service, etc.)	_____	_____	_____
Classroom work (Maximum 65 points) Average_____times .65 equals	_____	_____	_____

To arrive at a point value for the P.M.W.U. I took an average of the programs of the freshmen and used them as a guide. We put it into use the second semester. There was some criticism by some of the less energetic FFA members and by some whose farming programs were small, but as a whole it proved satisfactory. I found I had set my sights too low on P.M.W.U.'s; so consequently I raised them the next fall. When the students found they were getting credit for their farming programs, many of them enlarged their plans.

Recording Accomplishments

To receive credit for a supplementary practice or an improvement project the student must make selections in the fall and decide when he plans to do these practices. When the time arrives to do the job, he makes plans, a written report of the procedure to be followed, and important statements about the practice. The student then reports this practice before the class and we discuss it. I enter it on my scorecard for the six weeks in which it is done. I complete the scorecard at the end of the six week period by adding their points for productive projects, their FFA activities, and their classroom average.

I keep these scorecards in a notebook and use it to keep track of my farm visits and recommendations on the back. I also use them at the end of the year in filing the final report on supervised farming programs.

Progress Made

The following chart, compiled from information taken from the final report on farming programs sent to the state vocational office helps to show the results:

	Work Units		*Av. Projects*	
	1953	1956	1953	1956
Freshman	5.08	11.7	1.06	1.58
Sophomore	8.6	22.4	1.19	1.88
Junior	9.6	43.7	1.15	1.77
Senior	40.9	51.4	1.43	2.19

The farming programs have not

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How Am I Doing? - - -

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only increased in number of projects but also considerably in scope.

The results from incorporating FFA activities in the mark are less dramatic but encouraging. We have two state farmers from the class of 1956 after not having had any for a couple of years. The attendance and interest in FFA meetings has improved. When committees are appointed, they function, thus lessening some of the responsibility of seeing to it that they meet. The committee chairmen make reports at the meeting as proof that they have met.

Although results have been encouraging, it would be misleading to state that this method has been 100% effective. I can see these disadvantages:

1. Some students with limited facilities may find it difficult to meet the farming program standards.
2. For some students the productive man work units necessary for 30 points become the maximum.

Besides the advantages already listed I can see these other possibilities:

1. It tends to encourage diversification in the farming program.
2. Equal and definite standards (based on the amount of work involved) for all students.
3. Requirements progress as the student's age, finances, and ability increases.
4. Provides the incentive for expansion.
5. Encourages more supplementary practices and improvement projects from those with limited facilities at home.
6. It is very flexible. With a few point changes it could be made adaptable to part-time as well as full-time farming areas. If you want greater emphasis on FFA, you could easily change the maximum points to be allowed here.

Although the productive man work unit method of measuring and evaluating farming programs is not new and may not be useful in your particular situation in its present form, a few changes may make it work. It has helped raise the farming program standards and quality in the Blissfield area. □

Does your teaching die in the classroom?

Without adequate supervision it will do just that.

ROBERT HAIGHT, Vo-Ag Instructor, Wurtland, Kentucky.

"Effective instruction does not stop with what is done in the classroom. For it to stop there is proof that it is not effective."

I heard this statement made in an address by Dr. Carsie Hammonds, Professor of Agricultural Education of the University of Kentucky, at our annual Teachers' Conference in 1949. At the moment, I must admit, it did not impress me. During the remaining days of the conference, I often caught myself letting my mind wander back to the statement: "For it to stop there is proof that it is not effective." At that time I was teaching veterans in the Institutional On-Farm Training Program which was set up and arranged to give the teacher all the time he needed for on-farm instruction. I didn't have the problem which I knew confronted a lot of teachers.

The more I pondered this statement, the more meaningful it became and the more sense it made to me. I began to wonder about the cases of some teachers of vocational agriculture I knew who were so loaded with non-vocational subjects and extra-curricular actvivities that there was little time for on-farm supervision after making preparation for teaching the classes. This meant they could not do effective teaching, because in most cases their teaching did not go beyond the classroom.

Where to Start

In 1952 I became a regular teacher of agriculture at Wurtland High School where I am still teaching. As a result of my learning while teaching veterans that little is taught in the classroom unless it is followed with instruction on the farm, I began a campaign to sell the principal, superintendent, faculty members, and others on the importance of supervised farming programs and on-farm instruction. This job was difficult because it was new to most of these people and to most of the students. I had to convince all concerned that my so-called two free periods was not time set aside for me to take care of chore duties around the school. Nor was it time for me to substitute for some teacher who had to leave school early because her baby sitter wanted to leave early. The principal, in filling out the teachers' schedule on the bulletin board, listed these two periods as "free" under my name. This was an invitation for, not only him, but everyone else to have something planned for me to take care of during my "free" time. I finally convinced the principal this should be listed as on-farm supervision, adult- and young-farmer work, conference, and FFA work.

My first year I had an enrollment of 70 all-day students and 30 young and adult farmers. I was supposed to teach them in organized classes and give them adequate on-farm supervision. I also had a home room, which meant monthly reports, grade cards, and permanent record cards for approximately 50 students. I was in charge of all concessions at both football and basketball games, which meant I had to do most of the work; and at times I began to think I was assistant to the building custodian.

Goal Accomplished

I survived, however, and with never-ending work on my campaign to bring about better working conditions, I have almost accomplished my goal. I still have my home-room and I share in the co-curricular activities along with the other faculty members. I have my schedule arranged so that it is possible for me to supervise young and adult farmers in the afternoon before school is out. The principal and most of the other faculty members now have an understanding and respect for what I do when I leave school in the afternoons. I can practice what I believe—I never leave school with a boy or start out to visit an adult farmer that I don't recall that statement eight years ago—"Don't let it stop with what is done in the classroom." This statement was the most important factor in guiding

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Bail Joins Magazine Staff

Joe P. Bail

JOE P. BAIL, of the staff of the Agricultural Education Division, Rural Education Department of Cornell University became Special Editor for the North Atlantic Region on Feb. 1, 1958. He replaces his colleague, Harold Cushman, who is on leave in the Philippine Islands.

He received a Bachelor's and Master's degree from West Virginia University. Professional experience included teaching Vocational Agriculture in West Virginia, and serving as Head of the Agriculture Department at Glenville State College, (West Virginia). He also served on the Agricultural Education Staff at West Virginia University prior to coming to Cornell.

Bail has contributed several articles to the *Agricultural Education Magazine* on various areas of the program. He is the author of several publications used in the Vocational Agricultural program in West Virginia. Currently he is working in the area of Instructional Materials for Teachers of Agriculture in New York. □

Acquainting - - -

(Continued from page 253)

ing with Still Cameras Indoor, Rochester, N. Y.

3. Eastman Kodak Co., *Picture Taking Out-Doors,* Rochester, N. Y.
4. Eastman Kodak Co., *How to Make Good Pictures,* Rochester, N. Y.
5. Eastman Kodak Co., *Kodaguides,* Rochester, N. Y.
6. Eastman Kodak Co., *Kodak Information Book,* Rochester, N. Y.
7. U. S. Camera Corp., *Everybody's Photo Course,* New York City.
8. U. S. Printing Office, *Photography Vol. I, Navy Training Courses,* Washington, D. C.
9. E. F. Ekstrom, *Teaching Aids in Vocational Agriculture,* University of Mo., Columbia.
10. C. E. Rogers, *Reporting FFA News,* Iowa State College Press, Ames, Iowa.
11. Local camera clubs and suppliers of photographic materials.

There is no ready answer to the question, "What camera should I buy?" It is generally agreed that good pictures can be made with almost every camera sold by a reputable dealer. Box cameras, roll-film—non-reflex, twin-lens reflex, single-lens reflex, press and view and Polaroid Land cameras—all are good and have certain advantages. The major problem for a boy seems to be how to handle a camera for most effective results. If this is true, any camera the boy has, providing he has developed skill in utilizing it, is usually adequate for the jobs he has to do: to help his teacher and his chapter do a better job of keeping all informed concerning vo-ag and to aid his teacher in any way he can in getting over certain lessons.

Getting the most out of a camera is oftentimes the end product of much work and study. To get the most out of a camera, it appears that a boy should know, among other things, the following:

1. How to hold and operate a camera. This includes understanding camera settings, determining shutter speeds to use, focussing and exposing film properly.
2. What films to use for certain results.
3. What kinds of attachments to use so as to get better negatives. Examples of attachments are filters, close-up lens and photo flash accessories.

Again, in most instances, this information can be secured from reputable photo supply dealers and competent teachers. Making good pictures, however, comes after much study and practice.

Pictures Tell a Story

What kinds of photos are most needed to tell the chapter's story? It is generally agreed that action shots and pictures that depict human interest are in greatest demand. Perhaps action shots are needed most, as they present the story of vocational agriculture in a very meaningful and striking way.

Rogers points out the need for action and human interest shots in *Reporting FFA News,* pages 125 to 164. He likewise gives helps in how to make the kinds of photos needed. Local newspaper people and TV directors will usually provide information as to the types of pictures they need in presenting agricultural programs. In most instances, they are willing to offer constructive helps in providing the type pictures they need.

The teacher sometimes needs pictures other than those he has made to get his lesson across in the most meaningful way. It would appear prudent, therefore, for him to utilize his boys wheresoever he can in providing the materials needed. □

Does Your - - -

(Continued from page 262)

me toward obtaining better working conditions and in achieving what little success I have attained as a teacher of vocational agriculture.

Remember How YOU Felt

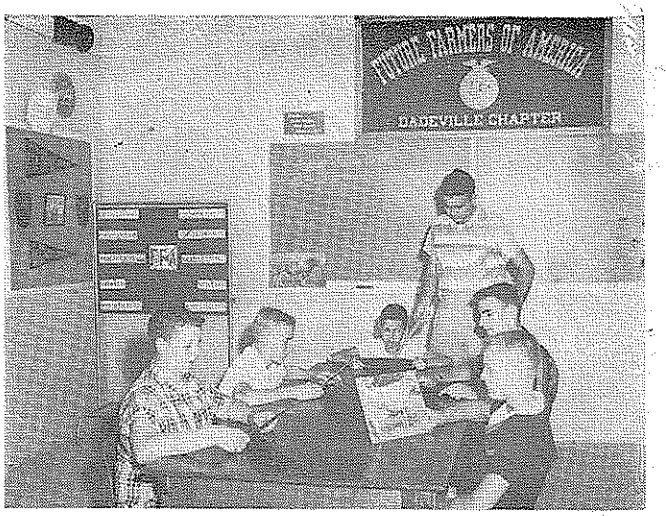
I would like to relate two personal experiences which, to me, demonstrate the importance of farm visits in vocational agriculture. When I was just a small boy the county agent stopped by one day to see my father. This was a rare event. The roads then were not very good; we were several miles from the county seat and therefore visits from anyone, except candidates for county office, were very few. He complimented my father on the fine job he was doing with his tobacco and discussed with him a new disease which was affecting his tobacco. This hour or so of conversation was a great inspiration to my father. I shall never forget the gleam in his eye when he came into the house to tell mother who the stranger was and what his business was.

Several years later I was lucky enough to take two years of vocational agriculture in high school. My agriculture teacher visited me. I shall never forget that first visit. Even though he probably didn't think it was fruitful, I received a lot of inspiration from the visit. As a result of that visit I was more interested in class and tried to do a better job with my farming program. This one event has remained in my memory as one of the important events in my life.

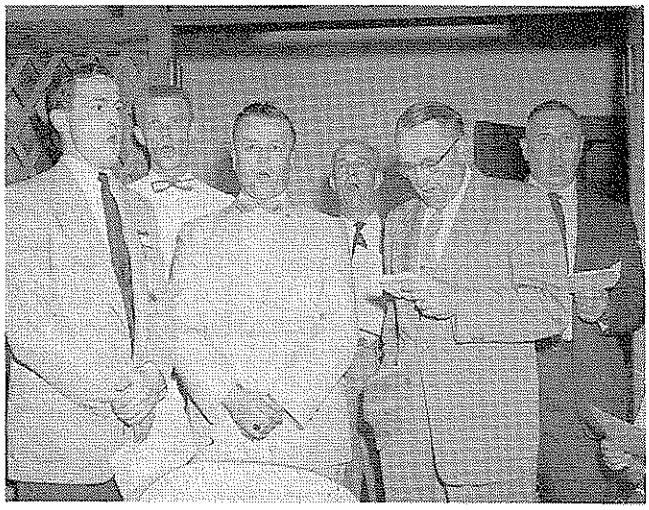
I believe it is the duty of each teacher of agriculture to strive for a working schedule which permits him to get out of the classroom and, through well-organized, well-planned visits, *not let the teaching die in the classroom.* □

The Cover Picture

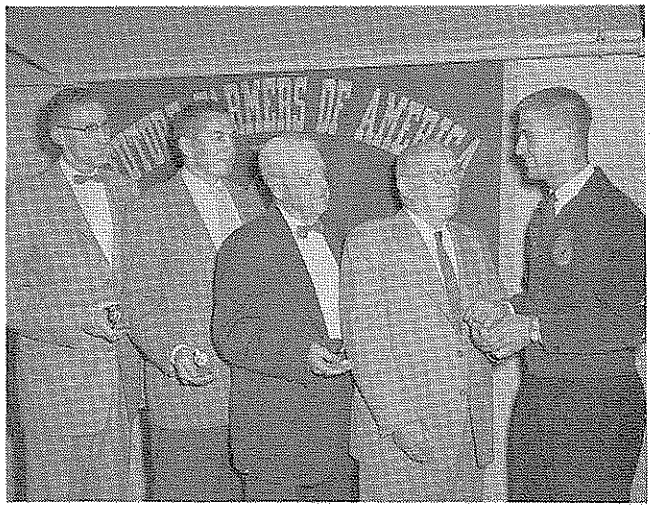
State officers and the adviser, Harry E. Nesman, of the Michigan Association of Future Farmers of America rating applicants for the state farmer degree. Standards are determined from data obtained from present year application. Photo by Dr. R. M. Clark, Michigan State University. □



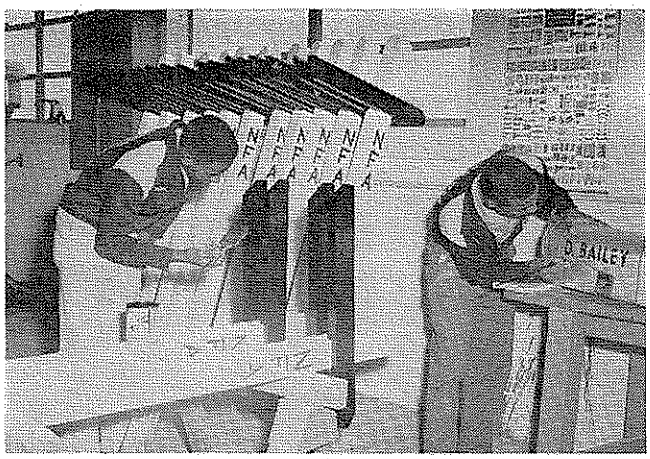
The Agriculture I Class at Dadeville High School, Dadeville, Alabama, using still, flat, mounted pictures in studying dairy cattle. The teacher is Oscar Strickland. These students later took a field trip to a nearby farm where cattle could be seen in their natural surroundings.



The Ames Sextet, all agriculture teachers in New York high schools, entertain during the Annual Association banquet held at conference in Deposit, New York, on June 26th. Reading from left to right: Philip Eastman, George Keller, James Rose, Winthrop Ames, Steve Smith and Fred Wickert. (Photo by Harold L. Noakes)

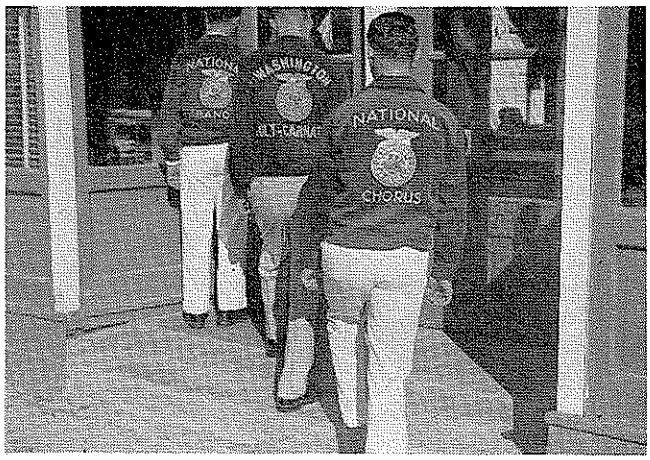


Four members of the Waterloo, Iowa, FFA Advisory Committee receive FFA gold paperweights from Jerry Litton, National FFA Secretary, in recognition of their outstanding support of FFA activities at the National Dairy Cattle Congress. Left to right the recipients are: Paul R. Brasch, local realtor and committee chairman; Norbert Kash, Assistant Manager of the Dairy Cattle Congress; H. B. Plumb and Mark T. Humphrey, recently retired president and treasurer, respectively, of the Cattle Congress. The presentation was made at the annual FFA Dairy Awards Banquet in Waterloo on October 1.



Recognizing a need for the beautification of rural mail boxes, the agriculture students at Southside High School, Blairs, Virginia, have launched a community mail box improvement project. Two N.F.A. boys are shown putting the finishing touch on a batch of reinforced concrete posts that were constructed in the school shop. Some sixty posts have been built since the project started. (Photo by C. A. Flood)

Stories In Pictures



Left to right: Harvey J. Rothschild, Ernie Trim and Dietrich Jung (Tolt-Carnation High School, Washington) tell a story with jackets. (Photo by R. D. Walen, Vo-Ag Instructor)

Vocational agriculture students at Minot, North Dakota, weighing rats used in feeding trials conducted by the class.