Stories in Pictures

GILBERT S. GUILER
Ohio State University

Agricultural Education

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Featuring: TEACHER PREPARATION and CERTIFICATION
1917 50th ANNIVERSARY 1967
1st National Vocational Education Act
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TEACHER PREPARATION

"Agricultural Education will disappear from our public schools in 10 years if we cannot produce the teachers needed."

The statement was made by a person who should know what he is talking about. He is a recognized educational leader. His past record in public education would indicate that he is friendly to agricultural education as would like to see the area not only continue but to grow and develop into more effective programs. He is a supporter of innovative programs, and thinks perhaps that this is the only route left to us to build up the supply of teachers needed now and in the years ahead. Such an innovative route would, of course, include several alternatives depending upon the situation in a particular state.

The purpose here is to examine this suggestion with some of the possible alternatives. Articles this month indicate some of these, especially those by Dave McCloy, Ovville Thompson and Jack Rudd. It may be that we have not yet developed to develop even more radical departures from the path in preparing teachers for the future. One alternative to be examined carefully is for a specialized teacher with less than a bachelor's degree. It must be readily admitted that such a departure will have some built-in problems, but the need is great until we examine every possibility for securing effective teaching in agricultural education. One of the strong points, as mentioned in these columns previously, of the teacher of vocational agriculture through the years has been that he had his degree in Agricultural Education, meaning that he had completed a college program designed to develop competencies needed as a beginning teacher of vocational agriculture. Yet, let's re-examine this assumption.

Many of the earlier programs in teacher education were based upon analysis. Here is the job that is expected of the teacher of vocational agriculture.

Here are some of the competencies that apparently any teacher needs if he is to do this job. Now, put together the courses and experiences, including student teaching, that are likely to make teachers extremely effective for the rural and small town high schools over the country 40 years ago. Today we face an entirely different situation. Even if we follow the old job analysis approach, we have difficulty. The job of the teacher of vocational agriculture is difficult today to fit into one one-department department. Expectations of the young teacher vary widely from school to school. State direction is generally less, teachers are becoming more local faculty members and less members of a statewide group of ag teachers. Many new programs in agricultural education are developing in the post-secondary institutions, not even in existence a few years ago. So, the job analysis approach becomes less reliable as a basic approach to teacher preparation.

How about the rapid growth of specialized teaching in a more limited agricultural area? Not only horticulture but ornamental horticulture. Not only farms but nurseries. How do we prepare teachers for these more specialized programs? Here again the job analysis approach leaves much to be desired. Too uncertain and changing too. Here is probably the best typology that we have to begin with less than a bachelor's degree. In fact, there is some question whether a regular undergraduate special will result in a competent teacher in this area of specialization. For example, the Ag Engineering major may still be superior for teaching Ag Mechanics.

(Continued on next page)
Theorv & Practice

Teacher Preparation

Continuing Education

An interesting situation in continuing education for professional leaders in the field of agriculture is developing in many states. One example will illustrate. Agricultural Extension Leaders are urging all persons in the program to work with Rural Extension Leaders in their future plans. Many state programs build this into their budgets as well as their plans. Here is a quotation from a recent letter sent out from one state Agricultural Extension Office to other states as well as within its own state.

We prefer master's degrees for assistant agents, but hire at the B.S. level if the applicant is qualified for the position. On hiring, the assistant agent has university academic status and can begin a degree program of his choice on-the-job in the county, taking one course a quarter on fee waiver. He finishes our 3-week summer schools (on full pay and fee waiver), and full time residency course work covered in large part on a professional leave accrual policy... The current average starting salary for an inexperienced assistant agent with a bachelor's degree is around $5,000 per year, and with a master's around $7,000.

If any state (or such a built-in system encouraging further graduate study by teachers of vocational agriculture, I am unaware of it. Of course, the two programs are different and financed differently. However, the fact remains that the leaders in Agricultural Extension see the need for building in further study for all people in the program. Apparently, we do not put near this emphasis upon further education for teachers of vocational agriculture, ag technology, supervisory, specialists, and teacher educators. Why?

In some ways, the building in of further and continuing education for teachers would be easier than for other groups. That is, through certification. Some states make more effective use of this in influencing teacher education than others. It is different in state higher education programs for further preparation and keeping up within their fields. More should be done along these lines.

Why don't more teachers and others in agricultural education continue their education beyond that necessary for certification? With all of our research efforts more need to be answered this question. Of course, as indicated earlier, our reward system usually influences our actions. Unfortunately, I think, national and state leaders in Agricultural Education have frequently not given high priority to continuing education. Old Policy Bulletin 1, for example, equates attendance at summer schools with time on the beach. Apparently the major purpose of that policy was to keep the teacher population in the community; if he went outside of the community it didn't make any difference whether he was in summer school or on the beach. Of course there was good reason for an idea in those days. The teacher was a new idea, employed during the summer and he needed to prove that he was on the job. O.K., but even a good thing can be overdone. I believe that we have overcome this one. In fact, a young farmer said that he thought that a policy should be set up to require an ag teacher to get out and see what was going on outside his own community.

Do you believe that everyone in agricultural education needs advanced degrees? Do you believe that each of us should continue some formal study as well as remain in the profession. We cannot supply our need for continuous study through individual reading nor through short workshops, important as both of these may be.

Cayce Scarborough

The AGRICULTURAL EDUCATION MAGAZINE

Another Editorial

NEW EDITOR

J. Robert Warnbrod

Meet our new Editor. Bob Warnbrod takes over the duties as Editor with the January, 1960, edition of Agricultural Education Magazine. He is Associate Professor, Agricultural Education, University of Illinois. A native of Tennessee, Bob received his B.S. and M.S. from the University of Tennessee and was teacher of vocational agriculture in that state. He did his doctorate at the University of Illinois and remained there on the faculty.

Bob is known as an effective teacher, writer and researcher. He has been a regular contributor to the magazine and active in the profession. For this year, Bob is to be found at the University of Illinois. His address is as follows:

J. Robert Warnbrod
Center for Vocational and Technical Education
Ohio State University
Box 2337
1800 Cannon Drive
Columbus, Ohio 43210

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December, 1967

Cayce Scarborough
Dear Sir:

Enclosed please find two responses to your request in the Letters to the Editor section of the 1967 issue of Agricultural Education.

Sincerely,

Dean Gentry
Assistant Supervisor
Indianapolis, Indiana

Thanks Don, for reading and re-reading positively! CGS

Dear Gaty:

Your fine leadership as editor of the Agricultural Education Magazine continues to be appreciated and inspiring. The phrases you use in your September editorial to "clarify the objectives in teaching and ... clearly state these objectives in behavioral terms" are particularly meaningful to me these days. Clarifying the direction of our teaching is essential for meaningful learning.

Enclosed is an article entitled "A Work Experience Model for Vocational Agriculture." It is Part 1 of a two-part article. Hopefully, these can be published in your November and December issues using the data outlined form and I have questions relative to format.

Sincerely yours,

David G. Craven
Assistant Professor
Univ. of Tenn.

Dear Mr. Scaborough:

I am submitting the enclosed article to you for possible publication in our Agricultural Education Magazine. I felt there was a need for an article such as this. It seems to me that the concept is educational in sound and looks into the future, besides having the philosophy of change that everyone one of us should want.

Each issue of the magazine is an informative one. I am especially appreciative of your views in the July 1967 editorial on maintaining and strengthening our local programs in vocational agriculture. I, too, feel that programs at the local level have great potential if organized effectively.

Sincerely yours,

Bruce W. Emanuel
Voc-Ag Instructor
Greenville, NC

Bruce, help me enjoy your article on horses in October. CGS

Dear Sirs:

Do you know where I can get one copy of each of these two issues of The Agricultural Education Magazine?

Vol. 30, No. 8, February 1958

Vol. 39, No. 1, July 1966

Sincerely yours,

George W. Weigens, Jr.
Head of Ag Ed.
Univ. of Tenn.

Can some kindhearted reader help George? CGS

114-11 Nimitz Drive
West Lafayette, Indiana

T. L. Faulkner
State Dept. of Education
Montgomery, Alabama

Dear Sir:

My name is Charles Redinger. I am a senior enrolled in the school of Ag Education at Purdue University. The reason for writing you concerns a matter of an assignment in one of my courses, English 444, Reporting Agriculture.

The assignment is this: I would like to find out from you the history of the farm teachers. I would appreciate your assistance in this regard. I need to know such things as the distribution numbers, the number of staff members, how articles are selected for the magazine, and who does the editing. I would like to know the qualifications of the staff members that are necessary to publish such a magazine. I would also like to know the background of some of the writers that write regularly for the magazine. Any other information concerning the writing, selecting, and publishing of this magazine would be helpful.

If you would help me on this assignment, I would be very grateful. I have chosen your magazine because of the connection it will have with my future job. I would appreciate your attention to this request. The assignment is due in two weeks. I wish to thank you in advance.

Sincerely yours,

Charles E. Redinger

Dear Mr. Redinger:

If you will refer to the inside front cover page of the magazine, you will find a list of the staff members, which includes the managing editors, the special editors, the editors at large, and the editorial staff. Most of these people contribute their time and effort without pay with the exception of the editor and business manager, who receive a very small stipend due to the fact that it is necessary for them to do this.

The editor is responsible for making the final selection of all articles to be included in each issue. It is his responsibility to select and make adjustments as are needed. In other words, he has the final say as to what goes into the magazine and the make-up of it. As to the qualifications of staff members, they are most all, as you can imagine, highly qualified teacher training staff and in order to qualify and be appointed to these positions, they should show some interest and a desire to participate.

The editor and business manager are chosen by the Board of Agriculture and serve a three-year term. On occasion, they have served longer than three years. The five editorial staff are appointed by the editor.

You asked about the background of those who write regularly for the magazine. Most all of those contributing regularly to the magazine are articles are either from the state staff of the magazine, or from university staffs. Occasionally an occasional person will contribute an article for the magazine. Any other information concerning the writing, selecting, and publishing of this magazine would be helpful.

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Sincerely yours,

Charles E. Redinger
TRENDS IN UNDERGRADUATE PREPARATION OF TEACHERS

O. E. Thompson, Professor, and J. A. Rude, Graduate Student
Teacher Education, University of California, Davis

Undergraduate preparation of teachers of vocational agriculture, while relatively stable during the first halfcentury of its existence, is undergoing major change. Historically, students who wished to teach "Smith-Hughes Agriculture" had to prepare their profession in special programs which were approved and supported financially by the state or regional vocational education. In order to qualify for federal funds, the programs for undergraduate preparation of those teachers had to meet certain standards approved by the U.S. Office of Education. The policy standards emphasized that the primary purpose of high school vocational agriculture was preparation for farming and, as such, required that the teacher be competent in plant sciences, animal sciences, management, as well as mechanics. In essence, these men were prepared to teach how to farm and to work in a one-room department. There was little change in this preparation until the passage of the Vocational Education Act of 1963, which modified the purpose of vocational agriculture to include preparation for any occupation involving knowledge and application of agricultural subjects whether or not such occupations include work of the farm or of the farm scene. As a result, a new program to prepare teachers of vocational agriculture in a few states had begun. Reorganization to include preparation for off-farm occupations during the past decade, most states were hesitant to make any modification until the law was changed.

This report is based upon responses from over forty teacher preparation programs in the United States and to land grant institutions to questions regarding their programs during the last five years.

Trends in Undergraduate Education

Undergraduate education in colleges of agriculture across the United States is in a period of transition. In most of the institutions surveyed there has been a general reorganization and realignment of objectives resulting in a realignment of curricula. This is particularly apparent in colleges of agriculture. Four colleges of agriculture have shifted to the "option approach" in which the college offers overall programs in agricultural science, agricultural business, and agricultural technology. Agricultural education students elect one of these curricula and receive a degree in the one elected with a major in agricultural education. This reorganization into fewer broader departments is accompanied by a consolidation of introductory courses, giving the students more opportunity to specialize in their sophomore, junior, and senior years.

The most dramatic curriculum changes have occurred within agricultural education departments. These changes were precipitated by changes in emphasis in vocational agriculture in the high school, by increases in general education requirements, and recent developments in agriculture. The demand for more specialized instructors influenced twenty-five of the twenty colleges to elect students for double major agricultural education requirements, and four colleges accept double majors. In two colleges, professors, research, and extension workers are available to agricultural graduates who agree to complete the professional education requirements. In two colleges, two or more required courses in technical agricultural subjects are available.

Teachers are attempting to recruit people with bachelor's degrees who are working in agricultural business or industry. With the passage of the Vocational Education Act of 1963, a number of the institutions became more aware of the importance of off-farm occupations, and four colleges added courses specifically designed to acquaint teachers with the vast opportunities in the agribusiness industry and to prepare them to disseminate this information to their students. In addition to those courses dealing with off-farm occupations, many colleges have included courses in occupational information and vocational guidance. The professional courses for teacher preparation are usually required for licensing and, as such, change little.

The time-honored requirement that a student must have completed the academic education before teaching vocational agriculture is gradually being replaced. Thirteen colleges hold to the traditional requirement that only agricultural education majors can qualify for teaching vocational agriculture. Conversely, twenty colleges accept students from any major if they have fulfilled the professional education requirements, and four colleges accept double majors. In two colleges, professors, research, and extension workers are available to agricultural graduates who agree to complete the professional education requirements. In two colleges, two or more required courses in technical agricultural subjects are available.

Implications

Historically, there has been a close relationship between the teacher educators in agriculture and their student teachers. This relationship, plus other common interests, has been somewhat clearly defined. In recent years, such relationships have been subject to change. The increasing number of off-farm occupations in agricultural business and industry, and in other vocations for which an understanding of agriculture is essential, have brought significant changes. Many are attempting to recruit people with bachelor's degrees who are working in agricultural business or industry. With the increasing number of off-farm occupations in agricultural business and industry, and in other vocations for which an understanding of agriculture is essential, have brought significant changes. Many are attempting to recruit people with bachelor's degrees who are working in agricultural business or industry. Eleven educators have been moderately successful in this endeavor by recruiting between two and four prospective teachers each year. A minimum of two semesters of post-graduate study is considered necessary to prepare them to teach vocational agriculture, although they partially completed the education requirements necessary to receive the bachelor's degree.

Improvement of Undergraduate Instruction

There is a need for in-service training programs. Some programs have been successful in solving some of the problems for the improvement of college teaching. Most of these programs were initiated by the departments of agricultural education. For example, at Pennsylvania State University, the Vocational Education Department offers a course in college teaching for both inexperienced and experienced staff members, and six other colleges conduct regular seminars for improvement of instruction. These seminars are open to teachers and principals. In these seminars, four colleges offer courses in teaching agricultural guidance and counseling. This course is open to all teachers.

Unfortunately, it appears that much of the motion in the undergraduate preparation of teachers comes from students rather than, as it should, from the profession. In twenty-two of the colleges, the student evaluation of the course is practiced. This evaluation manifests itself in various forms, including student self-evaluation, questionnaire, and publication of guides to courses and instructors.

Conclusions

In conclusion, the trends in undergraduate preparation for agricultural education includes:

1. A relaxation of the rigid requirements to qualify teachers in agricultural education.
2. A modification of the curriculum from emphasis upon production agriculture to the inclusion of preparation for other occupations in agriculture.
3. An introduction into the teaching of vocational agriculture of individuals prepared in majors other than agricultural education.
4. A general increase in the general education requirements.
5. A change in the objectives of vocational agriculture, reflected in the preparation of teachers.
6. Improvement of undergraduate teaching in agriculture is now recognized as a significant problem, steps are being taken to effect changes, and many of these changes are being implemented through agricultural education departments in the colleges.

Truly, then, undergraduate preparation in agricultural education is in evolution, as it should be, since it is involved in the preparation of teachers for one of the most dynamic industries—agriculture.
A WORK EXPERIENCE MODEL

DAVID G. CRAIG, Teacher Education, University of Tennessee

PART II

This is the second of a two-part series of articles describing a study relative to some developmental aspects of work experience in vocational agriculture. Part I described briefly the background, objectives and procedures of the study. It outlined a proposed work experience model for vocational agriculture consisting of an aim, objectives and guided steps. This article will present the implementing aspects of the model which involves teachers of agriculture and agricultural business employers.

Teachers and employers are two of the most important types of individuals involved in conducting work experience programs. These persons have the responsibility and the qualifications to apply to the job the knowledge, skill, and attitudes learned in school and required of the occupation. In implementing the work experience model, general and specific responsibilities were identified for teachers and employers. The general responsibilities for teachers included selecting, placing, and supervising students. The specific responsibilities for employers are listed below.

The area of inquiry relative to implementing the model included identifying the major concerns of teachers and employers when aid was needed to fulfill each specific responsibility. Teachers and employers were asked to indicate expected responsibilities of each other in conducting work experiences for students.

Teacher and Employer Concerns

A summary of the teacher and employer concern follows the presentation of each series of general and specific responsibilities.

1. SELECTING STUDENTS (TEACHERS)
   a. Reaching the purpose and procedures of work experience to students.
   b. Consulting with parents about work experience.
   c. Obtaining assistance from the high school guidance counselor.
   d. Sustaining contact with other high school teachers.
   e. Interests of selecting students for participation in work experience.
   f. Assisting the employers to schedule interviews and select students.

SELECTING STUDENTS (EMPLOYERS)

a. Reviewing school records of the applicant.
   b. Interviewing several potential student employers.
   c. Making the final selection of a student for employment.

2. SUPERVISING STUDENTS (TEACHERS)

a. Assisting the student with work;
   b. Determining the supervising or insub- stant that has been given by the employer;
   c. Discussing problems with the student and employer;
   d. Evaluating student performance;
   e. Maintaining records of student performance.

SUPERVISING STUDENTS (EMPLOYERS)

a. Providing initial training on the job;
   b. Following up the initial training;
   c. Maintaining records of student performance.

3. PLACING STUDENTS (TEACHERS)

a. Selecting students for work;
   b. Determining the placement of students;
   c. Providing initial training on the job;
   d. Evaluating the nature and scope of the job experience;
   e. Assisting the student and employer during placement.

PLACING STUDENTS (EMPLOYERS)

a. Determining the supervising or instructing that has been given by the employer;
   b. Evaluating the nature and scope of the job experience;
   c. Assisting the student and employer during placement.

4. CONCLUSIONS AND IMPLICATIONS

A summary of the teacher and employer expected responsibilities of each one of these expectations is indicated by 50 percent or more of the respondents.

There are various phases of agricultural education that need to be visualized and brought up-to-date to meet the needs of the students and community. This is especially true in farm electricity. Is your teaching according to standard wiring codes? Does it involve a practical application of what was taught?

In cooperation with our local IPS office, we are able to obtain a number of wiring books to give the student a practical application in using electrical wiring principles. Each book is equipped with circuit breakers, outlets, receptacles and pieces of wire. It would be rather difficult to justify the cost of these on a local level considering the length of time that they would be used each year.

The student is expected to wire 2 3-way switches and one light on one side of the service entrance box and an outlet on the other side of the box.

Students can understand thoroughly exactly what is involved in wiring a building on a farm. They have the opportunity to understand what is meant by circuit breakers, 3 conductor cable, 2 conductor cable, balanced circuits, polarization, solderless connection, and other items associated with wiring and electricity.

We teach learning by doing. This is definitely an area of teaching where we need to have done before learning takes place.

These responsibilities need to be evaluated in detail before making application elsewhere.

The consensus of opinions of teachers and employers in these districts indicated a large number of important concerns about fulfilling certain responsibilities. The study indicated that teachers have many more concerns than employers. However, teachers have more responsibilities which result in more concern. There were many important responsibilities that teachers and employers expected of each other as well.

This study was replicated and expanded to include parents, students, principals and others, as well as to other states and vocational services.

Diane E. Wielandt, Vo Ag Teacher, Odдел, Iowa

A WORK EXPERIENCE MODEL

(Continued from page 139)

LEARNING TO DO BY DOING

Expectations of employers by teachers

1. SELECTING STUDENTS
   a. Providing the prospective student and employer.
   b. Making the final selection of a student for employment.

2. INTERVIEWING STUDENTS
   a. Providing for student safety.
   b. Arranging for students to work.
   c. Planning the on-the-job work experience.

3. PLACING STUDENTS
   a. Providing the student to the business.
   b. Assigning work for the students.
   c. Evaluating the nature and scope of the job experience.

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   b. Assigning work for students.
   c. Evaluating the nature and scope of the job experience.
Married Student Teachers Change the Pattern

HOWARD BRADLEY, Teacher Education, Kansas State University

"Yes, I know that you have a new bride.

"Yes, you mentioned that your wife did not want to be alone at night.

"Yes, you told me that you have only one car and that your wife needed the car to get to be worked.

"Yes, you also told me that you two are operating financially on a shoestring.

"No, I don't think that you will be scheduled to do your student teaching at the local high school vocational agriculture department.

"No, you probably will not be scheduled for your student teaching assignment at one of the neighboring high schools within daily commuting distance from the university.

"Yes, I realize that the student teaching period is a long time for you two to be separated from each other except on the weekends at the start of your married life."

1908 Model Dilemma

Such conversation as this often takes place in the dilemma facing university supervisors of student teaching and the married students as they make plans for that all-important laboratory experience of off campus student teaching. The university supervisor and the student teacher are confronted with the problem of arriving at a mutually agreeable solution.

In the past five years the per cent of married majors in the Agricultural Education curriculum at Kansas State University at the time of student teaching has increased from 30.55 per cent for the years 1961-63 to 57.53 per cent in the 1966-67 year. See Table 1. This is an increase of 26.92 per cent in five years.

Married Student Teacher Problems

A great deal of research has been carried on about the changing role of vocational agriculture students. There is a need for an adequate supply of well trained teachers entering the field. It appears that very little study has been directed to the effect of the student's marital status as it is related to the student teaching program. Let us consider some of the effects of martial status that are in operation today and will continue to determine future student teaching programs.

1. The length of time off-campus for student teaching has been steadily increasing.

2. The distance from the university to the student's vocational agriculture center has been heightened.

3. The financial burden placed upon students teaching is often a two-leveled thing. Married student teachers are not only a student but the head of a household.

4. The student, interest, and financial ability are divided between the student's family and the student teacher.

Some of the circumstances related to the changing status of our student teachers cannot readily be changed. In reference to item one, the Association for Student Teaching, the TEPS Commission of the NEA and the State Departments of Education Certification requirements have equated increased semester hours of student teaching as being directly proportional to increased quality in teacher preparation.

Item number two regarding distance has been affected by the recent consolidation program in the Kansas schools. New or nearly completed, consolidation has decreased the total number of school districts in our state. This reorganization has already taken place in many parts of our nation, therefore there are fewer vocational agriculture departments throughout our nation within commuting distance from universities. It is evident then that student teachers will be required to do their student teaching at centers further from the campus than is practical for daily travel to and from the campus as many would desire.

The increase in the cost of living regardless of geographical location is many times overwhelming to "young married couples" when they discover that "two cannot live as cheap as (Continued on page 140)"

Sensitivity Training A New Dimension in Leadership Development

CHARLES LAW, Adult Education, N. C. State University

The purpose of sensitivity training is to help people help themselves. Its purposes are carefully selected to lead to greater sensitivity for each group.

FURTHERMORE, it might be asked how an ability to diagnose human relations situations could contribute to leadership development. It is not enough simply to be more sensitive to human relations. A leader must be able to tell the group what the group is doing.

are circumstances the in which the training is to be conducted. It is one thing to feel that something is wrong within a group. It is quite another thing to be able to know exactly what is occurring between which individuals. Sensitivity training offers an opportunity for individuals to attempt to improve their diagnostic skills.

An atmosphere of freedom is needed to what can be brought to light that can be brought to light a participant to say "I think John means what Bill just said." He might express further on why he feels that his diagnosis is correct. Both John and Bill can then either affirm or refute his diagnosis. The important thing here is that the individual participant gets an opportunity to practice, gain confidence, and improve his diagnostic abilities. This, then, is a second and most important way in which sensitivity training can assist in leadership development.

THIRDLY, the provision of opportunity to analyze individual and group human relations skills can assist in leadership development. The justification of the proposed relationship between this objective of sensitivity training and leadership development rests on the need for leadership.

This basic belief is that leadership skills can be learned. These skills refer not so much to certain techniques or gimmicks as to basic characteristics of the leaders behavior.

If a leader is to be effective, then he must be able to assess, diagnose and carry out problem-solving in human relations situations. The perceptions of an unstructured sensitivity training group permits an individual to try certain approaches, evaluate his attempts at leadership, make adjustments in his approach and develop the necessary sensitivity. It is in this atmosphere of scenic helpfulness is a great boost to a potential leader. Even if he does fail on his first attempts, this does not mean that subsequent attempts are forbidden him by the group. On the contrary, further attempts are encouraged by the group and the needed skills begin to develop.

A FOURTH objective of sensitivity training is to provide increased research knowledge as a basis for sensitivity and action skills. The relationship between this objective and leadership development is fairly obvious. Yet, in many so-called leadership development programs there is no attempt whatsoever to give this objective the emphasis it should have.

The manner of today would not think of using practices which research has shown to be effective, yet many people who aspire to leadership do so with no concept as to what research has shown to be true regarding the leadership functions. Sensitivity training attempts to put the leadership problem and thus develop better leaders.

THE FIFTH objective of sensitivity training is to provide an understanding of leadership development can be drawn. This objective is to relate the learnings of the trainee to one's home situation. No training is sufficient if it stops short of helping the learner plan how to use the learning gained on the job. Sensitivity training does just that. It has a major responsibility for adaptation and application of learning to the job. In most all groups using this sensitivity training approach, appropriate applications are planned.

REFERENCES


DECEMBER, 1967

THE AGRICULTURAL EDUCATION MAGAZINE
VOCATIONAL EDUCATION—
A MISSING ELEMENT IN CURRICULUM DEVELOPMENT

J. D. McGoman, Dean, Kansas State University

Separate Efforts
Efforts of regional laboratories for elementary and secondary education and regional centers for vocational education reveal somewhat of a usual disregard for curriculum efforts coming from each. It is unfortunate that there is seemingly little attempt to provide an effective continuing dialogue and articulation between the two. To the contrary, both dialogue and articulation are essential to the planning and development of an effective total program in public education.

Vocational Education AbSENT FROM Total Curriculum Planning
A further concern develops when one views a cursory review is made of general education and texts authored by prominent curriculum theorists and specialists. The more frequently used and cited texts and sources generally treat vocational education in the total curriculum in one of the following ways: (a) ignore it entirely and focus only on general education requirements; (b) recognize it as being present but only to be tolerated because it cannot be summarily dismissed; and (c) present it as a facet of total curriculum without supporting or rejecting it.

Griswold is cited by Tabo as stating: A rejection of technical subjects and of vocational education as any sort as a necessary influence is the logical consequence of this viewpoint. That type of education is considered to be not education, but training. It is an uncalled for encroachment on the essential work of general education.

While Tabo does not attempt such an argument against vocational education, she does present a view of general education and infers that vocational education is not an integral part of her theory of curriculum planning and development. An opposing point of view is presented by Staylor and Alexander who have presented a rather untried concept of the integration of curriculum for vocational education. However, it may be concluded that they do not support vocational education in planning the total curriculum as is illustrated in the following statement: . . . it should be understood that we are not considering the justification for or the place of vocational education in the program of general education for children and youth. But only the validity of the curriculum organization itself?

Implications
It is clear that the lack of support for vocational education from national curriculum leaders will not exclude it from the curriculum of the public schools. However, it is equally lucid that such points of view hamper and limit the progress of vocational programs and create hostility between professionals within each camp. The following suggestions are presented as possible beginnings to alter trends which affect vocational education:
1. Vocational educators need to recognize the contribution which general curriculum theory, planning and development can make in the development of the vocational dimension of the curriculum.
2. The vocational dimension of the curriculum should stress both vocational theory and practice and recognize the integral role of general education in helping to realize worthwhile goals in vocational education.
3. Vocational educators need to be involved in the total curriculum planning and development at local, state and national levels. Professionals in vocational education need to become a part of state and national planning groups (such as ASCD and others) which help to shape trends in total curriculum development.
4. Cooperative planning and development must be realized between regional laboratory efforts and national curriculum leaders for vocational education. However, it may be concluded that they do not support vocational education in planning the total curriculum as is illustrated in the following statement:

Themes for the Agricultural Education Magazine

February — TECHNICAL EDUCATION IN AGRICULTURE
March — RESEARCH AND DEVELOPMENT
April — THE IMAGE OF VOCATIONAL EDUCATION IN AGRICULTURE

Send articles to a Special Editor or to —
Editor J. Robert Warmbier
Center for Vocational Education
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The Editor

December, 1967

FIA IN TRANSITION

Jack Rudo, Vo Ag Teacher, Ceres, California

The rapid advancements in agricultural technology over the last few years have greatly affected all fields of agriculture. Since high school agriculture departments and the Future Farmers of America organizations serve as the initial training ground for future agricultural leaders, changes at the high school level must keep abreast of or precede changes in the agricultural industry.

Recent changes in the agricultural industry have created many agriculturally related jobs for women. Many high school agriculture departments have opened their courses to girls to prepare them for these positions, but only a few have given these girls the opportunity to become part of the curricular organization. Some states have opened the Future Farmers of America to girls; California, like other states, have initiated companion organizations for girls similar to the FFA — usually called the Farmersettes.

In January of this year, (1967), the California State Bureau of Agricultural Education recommended that "girls entering in agricultural education shall be allowed to become members of the Future Farmers of America." This recommendation was designed to determine:

1. The present status and future role of girls enrolled in agriculture classes
2. The present status and future role of the Farmersettes
3. The present status and future role of girls in the Future Farmers of America in California

The following statements are based on information obtained from the 118 questionnaires that were returned:

- Fifteen of the instructors reported that none of their classes are open to girls.
- Twenty-nine instructors restricted girls from their shop classes.
- There are very few classes designed specifically for girls in California, although there are horizons and electives available.
- Seventy percent of the participating schools have agriculturally-oriented, female organizations called the Farmersettes.
- It is not clear whether the agricultural instructor is the advisor of the Farmersette organization.
- The objectives and activities of the Farmersettes are very similar to those of the FFA. The most important reasons for forming Farmersette Chapter were: to provide leadership opportunities for girls, to provide an opportunity for girls to participate in fair and shows, and to provide a companion organization for the FFA.
- Three-quarters of the instructors in schools with a Farmersette Chapter reported that the girls would not be FFA members. Most of these instructors indicated that girls are not allowed membership in the FFA because of the Farmersettes organizations.
- On the basis of the sample, half of the instructors indicated that girls were in favor of allowing girls membership in the FFA. The other instructors stated they favored a combined FFA program while two-thirds of the instructors between the ages of 25 and 34 years of age preferred to maintain separate organizations.
- Three-quarters of the instructors in schools that have a Farmersette Chapter were in favor of opening the FFA to girls.
- Seven of the schools reporting allow girls to join their local FFA, and nine allow girls to compete in all of its activities at the local level.
- The most important reasons by which girls could strengthen the FFA were: the requirement for more responsibility, the encouragement of undefinable boy-girl relationships, and scholarship.
- The most important methods reported by which girls could weaken the FFA were: the requirement for more responsibility, the discouragement of undefinable boy-girl relationships, and scholarship.

In conclusion, the inclusion of girls in the FFA will shatter the time honored tradition of the male oriented Future Farmers of America. The transitional period will be a very frustrating one for FFA Advisors especially since the boys are so dramatically opposed to such action. One suggestion of considerable merit has been made to ease the boys' fears: to separate the problems posed by a co-educational FFA program into separate divisions having its own officers, judging teams, contests, and awards. At this point in time, our energies should be directed towards the admission of girls into the FFA before court actions force us to admit them. It will be much more pleasant for all concerned if we include girls in the Future Farmers of America because we want to not because we have to.

In agricultural training programs there is a need for vocational agriculture instructors on Electric Controls for Agricultural Mechanization. The W. Forrest Bear, Vo Ag Engineering, University of Minnesota

* Electric controls in agricultural mechanization

*This article is based on personal experiences during the organization and planning of off-season workshops for Minnesota Vocational Agriculture Instructors transported in a specially partitioned and padded footlockers. Each kit is identified by the color of the board that frames the component parts. Depending upon local costs for materials and labor the kit costs approaches $500.00 each. After having attended a workshop the teacher, power use or farm representative is eligible to borrow the kit for up to six months' use in his instructional program.

An enrollment fee is charged each program participant which covers the cost of a manual with transparency and a nominal depreciation on the equipment. The Manual, Suggestions for Teaching Electric and Basic Controls Used in Agricultural Production, has been developed by the Rural Electric Institute, 753 Third Avenue, New York, N.Y. 10017, and can be purchased from the Bear Co.

The organization of this program is such that the original program participants will train future agricultural educators interested in electrical control for agricultural mechanization.

Followup

The 48 men trained were the nucleus from which 367 Farmington Vo Ag teachers were trained last summer in the State of Minnesota.

The success of this program will be realized when the educational program reaches the electrical consumer. The Farmington Vo Ag teacher, beginning or adult farmer in the Vocational Agriculture instructor class or many other groups contacted by the power use or farm service representative.

This program has been both effective and rewarding as an educational training device for the Minnesota teachers and the M.R.E.C. The educational program goals can best be accomplished when all interested agricultural educators combine resources.

Page 130

Page 137
During our final months of college preserve training all of us were instructed in the proper procedure for making our papers intimate with the student program plan. Then we were turned loose on a world full of budget-minded superintendents and landlords. We learned the client, leagues and less-than-eager students. This resulted in a confused state leading to a somewhat hastily prepared program plan—and that plan improved very little with age.

The year to year improvement of that plan is usually like the new young doctor who was confronted with his first patient—nothing but a nervous rash. The doctor was baffled—to be asked the patient—"Have you ever had this before?" "Yes," replied the pa-tient—"several times." "Well," replied the young doctor, "this is an easy diagnosis—you've got it again!"

It is my belief no single factor is as important to an effective vocational agriculture department as a well-organized program plan. It is a plan for your entire year's work. The job is too important now. The time available is so limited. Resources seem too precious and planning too time consuming jobs too many—not to have your activities well planned ahead. It is the only way to get the most out of some seemingly important task—and then end up with too little—or no time for the more important and more urgent activities. We all know the truth. We do the more the possibilities for other activities are good. But the year ends, and you feel as if you just have a good start.

Must Be Written—Well!
Written work is usually not our first choice for a hobby. After planning a good department program plan several days of written work—What a vocational agriculture instructor needs to be seen doing things in the community, not just sitting in his office. And above all these, there is no FFA contest connected with having a good program plan to add glory and recog-nition to our work. Not that the work is not much encouraging, but several days spent in your office or classroom, weakened and worn. A good department program plan, is time very well spent.

Program of Work—
For the Department of the Supervisor
Larry Lockwood, Vo Ag Teacher, Grindy Center, Iowa

Since your position requires you to plan on the activity of your students, your own personal plans must be clear and definite. Your plan must be based on previous years' plans for your students and those of other teachers in your area.

The Plan
Your program plan needs to include these things:
1. A careful consideration of your department's needs and interests.
2. A careful consideration of your department's needs and interests.
3. A careful consideration of your department's needs and interests.
4. A careful consideration of your department's needs and interests.

Evaluation and Measurement
Gallwey makes a clear distinction between measurement and evaluation.
1. Measurement involves the collection of data on the educational program.
2. Evaluation involves the interpretation of the data collected.

Teacher Certification and Education
James Albragon, Teacher Education, Kansas State University

Teacher certification guarantees that the candidate has completed certain standards or requirements, and it acknowledges the candidate's ability to teach. The candidate has been certified by the state in which he or she intends to teach. The certification process involves the successful completion of a series of standardized tests that assess the candidate's knowledge and skills in areas such as teaching methods, student assessment, and educational psychology.

The program of work should include the following:
1. An evaluation of the department's program plan.
2. An evaluation of the department's program plan.
3. An evaluation of the department's program plan.

Summary
Now, after you have thought these things all along, don't relax. You really haven't even started yet. All you've accomplished is to tell people what you're doing. Now you've got to get out and GET THE JOB DONE.
Comparison of performances of the same individuals or of the same agen-
cies over a period of time is the best method known for ascertaining the results of the program. Comparison between different educational pro-
grams, however, produces less useful information. Comparisons among dif-
f erent programs having similar objectives have value if careful and detailed attention is given to the influences of the variable factors upon the educa-
tional program. The greater effect of this type of analysis renders it a less useful method of measurement than the "before and after" comparisons of the same program, individual, or agency.

Ginsfeld expressed the opinion that the evaluator must have criteria be-
fore he can measure. He further stated that the creative student might be assessed differently than other stu-
dents if one of the criteria is his creative ability. The creative student might be given an essay examina-
tion, rather than an objective ex-
amination in determining his ability. Creativity is an intangible value that should be preserved as well as eval-
uation. Creativity has not been an important characteristic in any of the educational programs.

Galsworthy states that the most reli-
ably measurable method of evalua-
tion is that of observing the student and noting the extent to which he utilizes the creativity that has been developed.

Teacher Certification and Evaluation (Continued from page 139)

Married Student Teachers

Change the Pattern

(Continued from page 132)
one." The financial burden of main-
taining two living quarters is an ob-
stacle to many young couples.

The need for vital, "top-notch" vo-
tational agricultural programs and for

well-prepared, enthusiastic beginning

teachers is greater than ever. How-
never, can the problems arising from

the changing marital status of the Ag-

ricultural Education Major and the

increasing need for teachers in this

field be overcome?

Meeting The Financial Problem

One of the major deterrents—that

of finance—can be met by a bold step

not being followed in our state.

I refer to the financial substantiation for

all student teachers doing their stu-
dent teaching at centers away from

the university and college campus and

who are not commuting to and from

the campus. This idea of a student

teaching stipend is one solution. The

issuing of student teacher scholarships

might be another way to meet this

problem of finance that seems to be

increasing each year. Students in our

teacher preparation institutions have

many outstanding qualities for which

they are desired. Agricultural Edu-
cation must meet this increasing com-

petition by developing a program that

will hold our prospective teachers. If

some solution is not brought about,

the shortage of vocational agricultural

students entering the Agricultural Ed-
cation curriculum will continue to

grow. Let us start practicing to

meet this challenge? What do you

suggest?

Raymond Clark

Michigan State University

Children, Norma F., MODERN FRUIT SCIENCE, Horticultural Publications, Rutgers—The State University, New


Prepared primarily for undergrad-

uate fruit and nut growing courses in

colleges, the book is not only complete

and technically accurate, but it is also

interesting and easy to read. Students

of vocational agriculture, short course

students, and growers of fruits and

nuts who need to master some of the
details of the business and who desire
to keep abreast with trends and re-

search developments, should find this

book of value to them.

Subject material is presented in an

attractive manner. Numerous photo-

graphs and charts are utilized to help

the attention of the reader. At the end of each chapter is a highly selective list of

questions dealing with the material, and an excellent collateral readings list.

Much detailed information that

might be difficult to locate in other

books is furnished in the abundant

appendix. Included is a listing of

world publications carrying pomologi-

cal information, cost of produce data,

a list of world experiment stations

and universities experimenting with
giving tropical fruits, and tables con-

taining representative fruit crops and

fields of research, and life information.

Many professional runs re-

viewed, criticized, and appended to
different portions of the book.

Professor Childers was formerly

Assistant Director and Senior Plant

Physiology Laboratory Stu-

dent in Puerto Rico. He cur-

rently serves as Professor and Research

Specialist in Horticulure, Rutgers—
The State University of New Jersey, New

Brunswick.

Gay E. Timmons

Michigan State University


pp. 602, $14.75.

Designed as a modern reference that

brings together a comprehensive vo-

cabulary of 40,000 terms including

the entire range of the biological sciences. There are many two and technical

terms that are not important enough to be included in an encyclopedia but

which do warrant a brief dictionary
definition.

The volume includes the ordinary English words that are used in a dif-

ferent context from that generally

understood. Latin words included

are those for which there is no exact

English equivalent; also, the defini-
tions or the synonymy of nearly all

terms of original rank and above, and the great majority of families. The

vernacular names of organisms were

guided by the usage in contemporary

books native to the countries involved.

The descriptive terms are these which are peculiar to biologists or entomologists

and are given in their literal mean-
ing in that science. Several

thousand common roots from which

many biological terms are coined have been included; as well as technical

jargon, plural, and hyphenating or

compounding. Finally the author has

included "qualifications" due to the

fact that many areas of the world use

the same vernacular name for two
different organisms.

This comprehensive book of English-

language references is the total cur-

riculum in the science. It should be

very useful to the biologist, teachers

and students on the university or com-

munity college level in existence.

Dr. Peter Gray joined the faculty of

the University of Michigan in 1958,

becoming Head of the Department of

Biology in 1947.

—Walter W. McCarley

Michigan State University

BOOK REVIEWS
Providing Instruction For Young Farmers - A Pleasure!

R. B. CARTER, Vo Ag Teacher, Appomattox, Virginia

Any instructional program for young farmers should be based on the needs of the particular individuals. Young farmers are primarily interested in the activities and topics which are current problems to them or will be problems in the very near future. Perhaps the main reason that teaching young farmers is a pleasure is that results are seen very quickly and progress may be measured in a very short span of time.

As most educational work is done by young farmers should participate in developing their instructional program. After the problems to be studied have been decided upon, it is the responsibility of the instructor of vocational agriculture to teach the units or lessons.

Teaching Adults

The process of learning is about the same for adults as for high school students. Age and experience make some difference. I believe, however, that the greatest difference in teaching young farmers, as compared with high school students, is largely in the degree of motivation. Young farmers are farming and, in most cases, have the responsibility of increasing the size of their farms. High school students are more inclined to consider instruction as training for some future event or event which may not involve them. Consequently, young farmers recognize the problems involved in increasing the size of their farms and have a keen interest in solving them than do high school students. An instructor of vocational agriculture must be capable of presenting the "how" and "why" of the "what." It is not enough to present the information, the student must be taught how to use it.

The Clusses

Topics for study in our young farmer classes are chosen by the students themselves. As the teachers, I have the responsibility of selecting the method or methods that are to be used in teaching these topics. I believe the teaching-learning process carried on in a classroom should be very informal. For best results, a supportive relationship must exist between the teacher and students. Perhaps this may be best described as one of mutual friendliness and confidence. The young farmer wants the teacher's help. Otherwise, he would not attend the class.

There is a great deal of variation in the kind and nature of the topics we discuss in young farmer classes at my school. Topics dealt with in the past year included:

1. Problems in production and marketing (carrots, wheat, corn, tobacco, etc.).
2. Using chemicals on the farm
3. Farm management - an introduction
4. The economics of using fertilizers
5. Determining the cost of operating a farm
6. Determining the cost of using credit
7. Budgeting crops
8. The farm outlook
9. Soil and water management problems
10. Using artificial breeding
11. Winning the beef contests

In studying each of these topics the emphasis was on how to cut costs, not on teaching farmers anything new. One farmer has little or nothing to do with price, our farmers are mainly concerned with what they can do to reduce the cost of producing farm products.

The longest length of class period may be only a matter of opinion, but I try to keep it to about 15 hours. I have learned that young farmers will stay longer for a class that interests older farmers, but I plan each class session for about 90 minutes. Informal discussion follow each class session, and I usually talk with individuals long after the class ends. These discussions seem to be very profitable to the young farmers, and if a teacher is alert he will learn a great deal about how young farmers talk among themselves.

The Methods

I have found the conference to be one of the best methods for teaching young farmers. No two young farmers are exactly alike. Each has had different backgrounds and it is impossible to teach all at the same rate. The individual must be allowed to arrive at his own decision and the conference method is very useful for this purpose. Lectures have a place, if used for short periods of time. Demonstrations are good, but difficult to handle or control. Demonstrations are excellent, especially for those units which can be handled on a farm. Immediately following a demonstration, it is important to provide for practice by the students of each performance demonstrated. Visual aids add much to a class for young farmers. I have found slides and films extremely useful. I am particularly fond of the overhead projector. In adaptation to a wide range of personages it makes use of interesting and holding the attention of the learners.

The Teacher

I may be prejudiced, but for the best results I think the vocational agriculture teacher should teach only the needs of the class for young farmers. Results personnel are fine as consultants, but may do a poor job of teaching young farmers. Often such people are not familiar with the individual farm situations of the farmers and, through not a fault of their own, just don't have the ability to help the young farmers want and need. If an outside person is used, I strongly advise that the teacher of vocational agriculture explain to him the kind of information he wants presented to the class and give him as much background as possible on the members of the class.

During fifteen years experience, I have not found outside people very useful in teaching young farmer classes.

I find it advisable to have at least one class or group activity each month for young farmers. A period of concentrated study should be scheduled during the winter months or the "off season" for farm work. We have used a series of classes that tie in such units with a "farm management" program. Usually we have a class each week for four to six weeks on one or more special topics.

The Young Farmers

Never underestimate the knowledge and experience of a farmer. A young farmer frequently has a particular line of thought for a long time before he mentions it to me. Often he has read a great deal more than I have about the subject. Because some young farmers are quite familiar with a particular problem, it is very desirable to encourage such to participate in class discussions as much as possible. No group in the class may have the answer, but collectively they may. If I learn that a young farmer has worthwhile knowledge or experience, I try to arrange for him to share it with the group during a class session. With the dissemination of information is a means of increasing the ego of the individual and helps him develop confidence in himself.

The educational attainment of members of a young-farmer class may vary a great deal. In my group, I have an eight grade dropout to one with a college degree from an agricultural college. This is not an impossible occurrence, but it is a good situation since the range of experience is greater than it would otherwise be. However, the difference in educational attainment must be taken into consideration as I plan each lesson.
Stories in Pictures

GILBERT S. GUILER
Ohio State University

Louise vocational agriculture students gain additional occupational experiences in Dairy selection on a contest basis. Photo by Cards.

James H. McDon, teacher of vocational agriculture at the Franklin, Tennessee High School, gives instructions to Weston Yeagy on the use of an iron bending as a part of his occupational experience.

Missouri vocational agriculture students find that greater savings can be accomplished in their occupational experience program, by using on-the-job feed mills.