STORIES IN PICTURES

REALISTIC EXPLOSORY ACTIVITIES — Pupils enrolled in an exploratory agriculture class at R. E. Taylor Junior High School (Stephens City, Virginia) are shown participating in realistic activities. In the photo on the left, Larry Powell, exploratory agriculture teacher at the school, is demonstrating the operation of a combine. The photo on the right shows Wayne McClimister, shop teacher at the school, explaining the operation of a four-wheel tractor and garden supplies store. (Photo by Robert Yehl and courtesy Larry Miller, Virginia Polytechnic Institute and State University)

DEMONSTRATING ENGINE ADJUSTMENT — Students at Cooper Plate ROCES (New York) are shown observing the adjustment of a four-cylinder engine by their teacher, James Kall. (Photo courtesy Richard Jones and Arthur Berkey, Cornell University)

PRINCIPLES OF ENGINE OPERATION — Tom Gates, agricultural mechanics instructor at Schenectady County College (New York) ROCES, is shown explaining the operation of a four-cylinder engine to pupils enrolled in Agriculture class. (Photo from Richard Jones and Arthur Berkey, Cornell University)

ON-THE-JOB SUPERVISION — Jeff Bohn, agriculture student at Opelika, Alabama, is shown checking seeds in the operation of the new incubator in the school. (Photo by Frank E. Ellington, Alabama Department of Education)

MEDIA IN AGRICULTURAL EDUCATION — Mississippi State University presented a show reducing new materials required for a funded project on Career Preparation in Agriculture. Project staff include (left to right): David Woodbery, graduate student, and John Davis. (Photo by Robert Yehl)

AGRICULTURAL EDUCATION

Volume 48 Number 11
May 1975
### GUEST EDITORIAL

#### Individual Responsibility for Professional Improvement

Herbert Schumann  
Teacher Education  
Sam Houston State University

Are you satisfied with your program of professional growth? Have you attended at least one agricultural short course in the last year? Do you regularly read agricultural magazines and professional journals? Have you attended as many as possible of the professional meetings sponsored by the State Department of Education? Are you aware of all the innovations affecting the agriculture sector in your local community? If you have a negative response to any of the above questions, perhaps you should ask yourself whether you are in danger of professional complacency and stagnation.

It is impossible during a baccalaureate program to receive all of the necessary pedagogical and agricultural competencies that are needed to become a successful vocational agriculture teacher. In fact, most beginning teachers concede that more was learned about agriculture and teaching skills during the first year on the job than was acquired during the entire undergraduate program. One of the key concepts of career education is that education must be a continual developmental process as contrasted to a terminal type program. Teachers should not forget that they also must be one of the clientele of this career education movement. With rapidly expanding technological innovations in agriculture, it becomes increasingly critical that vocational agriculture teachers stay abreast of new developments in their profession.

The momentum of off-form instructional programs necessitates an added impetus for in-service education. Many teachers are required to continue their formal education in order to acquire the certification necessary to teach in one of the emerging programs, while all teachers must continue to grow professionally if they are to be a viable force in agricultural education.

Historically, agricultural teachers have been recognized as educational leaders in meeting the challenge of maintaining professional competence. The profession, however, cannot rest on past laurels and must continue to face the challenges of a rapidly expanding agricultural technology.

The principal responsibility for in-service education must rest with each individual teacher of vocational agriculture. Many opportunities for professional improvement can be found by the individual who is sincerely interested in staying abreast in his chosen profession. Some of the traditional sources, as well as new concepts, which should be given consideration in planning a comprehensive program of in-service education are:

1. Graduate courses have historically been and will continue to be, a primary vehicle whereby professional educators up-grade their professional as well as technical skills. Teacher educators at college and universities have the opportunity to exchange ideas with colleagues from institutions both nationally and internationally and can assist teachers in keeping abreast of emerging and innovative concepts and technologies.

2. Short courses which may be held either at the university level or in the local community are one of the best means for keeping abreast of new developments in the profession. Persons responsible for organizing short courses for vocational agriculture teachers have been heralded for separating the "chaff" from the "wheat" in selecting the most essential information for in-service meetings. Because of the usefulness and applicability of short courses, persons in policy making positions should consider adoption of a more liberal policy regarding granting advanced credit for participation in these programs.

3. The teacher who is sincerely dedicated to improving his professional competencies will find many opportunities within the local community. Utilization of local agricultural industries and similar resources can provide a rich reservoir of learning experiences for the local agriculture teacher. With the increasing emphasis on off-farm programs, leaders in the profession should give greater consideration to giving college credit to teachers for work experience in local agricultural occupations.

Adult farmer groups and advisory councils may provide
The principal responsibility for in-service education must rest with each individual teacher of vocational agriculture. In-service education has critical implications for all who are involved in the educational process—local vocational agriculture teachers, state departments of education personnel, teacher educators, and local school administrators. Local vocational agriculture teachers must assume individual responsibility for professional growth. Teacher educators should bring a touch of the academic into focus for teachers. The state staff responsible for vocational agriculture must provide leadership at the state level for a successful program of in-service growth. School administrators who work with teachers on a daily basis must provide the climate necessary for a continual program of professional growth. In-service education can only become a reality through the cooperation of all segments of the educational profession.

**LETTERS TO THE EDITOR**

Thank you for responding to my letter and for bringing me up to date on the issues affecting your readership. As I mentioned, I will be discussing the newly emerging urban/rural coalition in a series of speeches, position papers, and articles for the rest of this critical important Bicentennial year. I will share your copies of these papers. Some of the points that will be discussed will be controversial, but I believe that only by raising issues that confront both farmer and consumer in a frank, open way, can we establish a truly meaningful dialogue.

Along with whatever you feel would be suitable for publication, I should add that if any of your readers would like to receive the full text, they can write me and ask to be placed on our urban/rural coalition mailing list. Again, thanks for your cooperation. I will continue to read your informative publication with great interest. Your assistance will be of immense value to me in my deliberations on the House Agriculture Committee.

Yours sincerely,

Fred Richardson
14th District, New York Congress of the United States 1523 Longworth House Office Building Washington, D.C. 20515

**COMING ISSUES COMING**

**JUNE — The Summer Program**

**JULY — Attitudes and Values for Employment**

**AUGUST — Secondary Programs for the Talented**

**SEPTEMBER — Planning and Managing School Facilities for Ag**

**OCTOBER — Preparing Teachers of Vocational Agriculture**

**NOVEMBER — Teacher Organizations and Professionalism**

**DECEMBER — More Effective Teaching**

**THE AGRICULTURAL EDUCATION MAGAZINE**

**SKILLS WEEK**

O. S. Gilbertson
Agricultural Education California Polytechnic State University, San Luis Obispo

Vocational agriculture students are to be vocationally prepared in the instructional program areas, teachers must also receive training in these respective areas. All too frequently the preservice teacher preparation program does not have sufficient time to adequately prepare the teacher candidates.

Skills Week, four and one-half days of in-service training each June at California Polytechnic State University, activities for which no break in instruction is necessary or desirable are reserved for Friday and Saturday morning. A broad enough variety of subject matter is generally offered, providing all participants an opportunity to select areas of specific interest to themselves. Additionally, there is a sufficiently broad array of subject matter so that there will be some very basic skills provided for the novice as well as advanced skills for the experienced teacher.

Offerings provided in the 1973 Skills Week included:

- **Session I:** Prevention Medicine for Livestock
- **Session II:** Beekeeping
- **Session III:** Fitting and Showing of Livestock
- **Session IV:** Pest Control

Additionally, Parliamentary Procedure for Beginners was offered during the evening for those interested in learning the fundamentals of parliamentary law. This program of in-service training provides an excellent opportunity for teachers to become knowledgeable in areas which were deficient in their preparation. First-year teachers have this opportunity to pick up basic skills relative to the area in which they will be teaching. Not only do these beginning teachers benefit from the class instruction, but also from sharing ideas with other workshop participants.

Planning for Skills Week starts early in the winter when teachers are offered the opportunity to respond to a questionnaire while attending their regional agriculture teachers meeting. A tentative schedule is then developed and reviewed by the Bureau of Agricultural Education staff and the Community College Agriculture Specialist, resulting in the selected series of skills areas being put into a workable program.

*(Concluded on page 255)*
IN-SERVICE EFFORTS KEEP YOUNG FARMER PROGRAM ROLLING

Jack Fritchard
Agricultural Education
Oklahoma State University

and

Bob Mitchell
State Young Farmer Coordinator
Oklahoma Department of Education

The ART of In-service Education

James Albritt
Teacher Educator
Kansas State University

The in-service teacher education programs take place while the recipients of the service are performing the teaching function. The recipient of the in-service instruction is actually engaged in the occupation for which he (she) is being trained which provides an ideal learning climate. What teacher educator would not relish the thought of serving in this position?

Technically the answer to the above question should be an emphatic yes, however there are problems which must be overcome before the question is so answered. The major problems of in-service education centers around the systems commonly used, which include economic and non-economic considerations. In-service education programs arise when inservice education is given to proper attitudes, resources, and time considerations. Conversely a successful in-service program in agricultural education is one which is conducted with ART i.e., with proper attitudes, resources, and time.

Proper attitudes for in-service education in agriculture involve a dedication to serving the teacher who is actively engaged in his profession. The teacher educator places a high priority and an energetic efforts of his work in in-service education. The goal is one of having no failures of teachers in the in-service teacher education program. The teacher educator must convey to the students the fact that a successful in-service program and said, “Say, that should work in my own community.”

The reservation list now has 56 teachers enrolled for the 1976 Young Farmer Tour to our good neighbors to the north — Kansas Young Farmers.

REFERENCE

THE AgriculturAL EDUCATION Magazine

MAY 1976

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What Are Your Priorities in Your Job?

LarryLockwood
Vocational Agriculture Instructor
Grundy Center Community School
Grundy Center, Iowa

As years of teacher experience increased, young farmer and adult classes, and visits to young farmer and adult class members became more important.

There are more things that you, as a vocational agriculture instructor, could do than you possibly have time to do. How do you decide things you will do and what things will remain undone when all your available time is gone?

A beginning instructor is faced with the very frustrating task of deciding what he will be forced to leave undone. How many times of young instructors have you heard say, “I never see my husband—I'm glad we don’t have a family yet.” It is my feeling that the high “drop-out” rate of our profession is due largely to that problem.

We seem to make more demands on instructors’ time every year. In Iowa during the last 18 years, we have added at least eight new time-consuming activities in our vocational agriculture departments. They are: 1. the agriculturally related occupations program; 2. the postsecondary program; 3. many “specially” courses (horticulture, exploratory 6th, 7th, FFA Alumini; and 8. the State Young Farmer Association. During these same 18 years, we have done only one thing that would help to lighten the demands on instructors’ time. We have lowered the young farmer class requirement from 20 to 12 meetings.

After an instructor has been “softered up” by all the time-consuming tasks, he probably will have a very frustrating feeling caused by all the things that he has not been able to complete to his satisfaction. When some tempting job offer comes along outside of teaching, he is very apt to take it.

In Iowa we decided to determine what the job priorities of vocational agriculture instructors really are. At our 1975 Iowa Vocational Agriculture Summer Conference, we devoted an entire morning session to the setting of job priorities in teaching vocational agriculture. We developed a list of 39 activities that demand our time. These activities included our entire week, not just time spent during our “working hours.” They included our families, our church, our leisure time—our entire use of all our available time.

Two hundred and three Iowa vocational agriculture instructors were given this list of 39 activities and 70 “mark- ers” (keywords of corn). They were asked to distribute these 70 markers among the 39 activities according to the relative importance of each activity. We used a scale of no markers meaning very little importance and four markers meaning highest in importance of each item. Then these ratings of each individual instructor were analyzed by computer.

In Table 1 we have placed those 35 items in order from most important to least important according to the average ratings of all 203 participating instructors. Two of the three activities given highest priority by these instructors deal with family life, and one of these activities is a part of the teaching job. The five highest ranking priorities in order are:

1. Teaching local day school classes; 2nd—Spending time with my family on weekends and vacations; 3rd—Finding time to do activities with my family every day; 4th—Working with supervising experienced programs; and 5th—Working with local FFA chapter activities.

The five activities given lowest ranking in importance were:

1. Making family visits; 2. Having a second area of interest for personal monetary profit; 3rd—Working with activities of professional organizations outside of vocational agriculture; 4th—Working with the county government; and 5th—Working with the State Young Farmers Association.

In a second comparison the group of instructors was stratified by years of experience in teaching vocational agriculture. We divided these groups: no years of experience to 2 or less years of experience; 5-10 years of experience; 6-10 years of experience; 11-20 years of experience; and over 20 years of experience. Some very interesting changes in priority are shown here also with regard to length of experience.

All groups listed day school classes as being most important to them—and all groups listed the FFA Alumni Association as being least important. As years of experience increased, young farmer and adult classes, and visits to young farmer and adult class members became much more important. As we might expect, having a nice home increased in importance with increased years of experience. However, the importance of individual leisure time decreases with added experience. As teachers increased in experience, they seemed to feel that participation in fairs and shows decreased slightly in importance, and that service work in the community such as Lions, Boy Scouts, etc. increased slightly in importance.

Beginning teachers rated several items quite important, compared to teachers with any amount of experience. These items were: use of a department council; visits to agriculture work experience training stations; and attendance at in-service training sessions. Beginning teachers felt attendance at vocational agriculture meetings was less important than did those with experience.

Rank

<table>
<thead>
<tr>
<th>Priority Item</th>
<th>Rank</th>
</tr>
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<tbody>
<tr>
<td>I feel that teaching local day classes is very important.</td>
<td>1</td>
</tr>
<tr>
<td>I feel that spending time with my family on weekends and vacations is very important.</td>
<td>2</td>
</tr>
<tr>
<td>I feel that finding time to do activities with my family every day is very important.</td>
<td>3</td>
</tr>
<tr>
<td>I feel that supervising experienced programs is important.</td>
<td>4</td>
</tr>
<tr>
<td>I feel that local FFA activities are very important.</td>
<td>5</td>
</tr>
<tr>
<td>I believe that extracurricular activities is important.</td>
<td>6</td>
</tr>
<tr>
<td>I feel that FFA contests and conferences pass the local chapter meeting.</td>
<td>7</td>
</tr>
<tr>
<td>I feel it is very necessary to keep up-to-date in agriculture.</td>
<td>8</td>
</tr>
<tr>
<td>I believe that time activities are very important.</td>
<td>9</td>
</tr>
<tr>
<td>I feel that my work with adult and/or young farmer classes is very important.</td>
<td>10</td>
</tr>
<tr>
<td>I feel that teaching about careers and working with job placement is very important.</td>
<td>11</td>
</tr>
<tr>
<td>I believe it is very important to have a nice home, lawn, garden, car, etc.</td>
<td>12</td>
</tr>
<tr>
<td>I believe that neatness and organization of school facilities is very important.</td>
<td>13</td>
</tr>
<tr>
<td>I feel that farm visitors to potential members of all classes are very important.</td>
<td>14</td>
</tr>
<tr>
<td>I believe that attendance at professional meetings is very important.</td>
<td>15</td>
</tr>
<tr>
<td>I believe that it is especially important to take an active part in my church.</td>
<td>16</td>
</tr>
<tr>
<td>I feel that farm visitors to adult and/or young farmer classes are very important.</td>
<td>17</td>
</tr>
<tr>
<td>I believe it is very important to keep up-to-date in local reports, county plans, and other paper work.</td>
<td>18</td>
</tr>
<tr>
<td>I believe that meetings are a very enjoyable educational tool.</td>
<td>19</td>
</tr>
<tr>
<td>I believe that it is very important to keep up-to-date in training and teaching skills, etc.</td>
<td>20</td>
</tr>
<tr>
<td>I want to be a good neighbor to everyone —I don’t ever want to seem to be too busy to help.</td>
<td>21</td>
</tr>
<tr>
<td>I believe supervising my students’ livestock exhibits at fairs is very important.</td>
<td>22</td>
</tr>
<tr>
<td>I feel that visits to work stations of students in a work experience program is very important.</td>
<td>23</td>
</tr>
<tr>
<td>I feel it is very important to coordinate my Vo-Ag program with all other aspects of the curriculum.</td>
<td>24</td>
</tr>
<tr>
<td>I feel that visits to work stations of students in a work experience program is very important.</td>
<td>25</td>
</tr>
<tr>
<td>I believe I must keep up-to-date on reports and paper work required along with other aspects of the curriculum.</td>
<td>26</td>
</tr>
<tr>
<td>I feel that working with the Vo-Ag Departmental advisory council is very important.</td>
<td>27</td>
</tr>
<tr>
<td>I believe that extracurricular activities is very important.</td>
<td>28</td>
</tr>
<tr>
<td>I believe that making family visits is very important.</td>
<td>29</td>
</tr>
<tr>
<td>I feel that supervising experienced programs is important.</td>
<td>30</td>
</tr>
<tr>
<td>I believe that extracurricular activities is very important.</td>
<td>31</td>
</tr>
<tr>
<td>I feel that the young farmer and adult classes are very important.</td>
<td>32</td>
</tr>
<tr>
<td>I feel that making family visits is very important.</td>
<td>33</td>
</tr>
<tr>
<td>I feel that the young farmer and adult classes are very important.</td>
<td>34</td>
</tr>
<tr>
<td>I feel that making family visits is very important.</td>
<td>35</td>
</tr>
</tbody>
</table>

Beginning teachers and long tenured instructors rated church participation much more important than did those in other experience categories, but their reasons for that importance may be quite different. A second area of interest for personal profit was considered more important during the middle years of teaching experience (3-10 years).

We also stratified the 203 participating instructors by their future plans. Those in the first group planned to make vocational agriculture teaching their life's work. Those in the second group felt they are in vocational agriculture teaching as a step toward their chosen career, probably in an agriculture-related area. Those in the third group felt they would take any job offered them that they considered to be a personal advancement.

All three groups considered class days most important and the FFA Alumni Association least important of all items. As we compared these groups in order (from group one to group three), the importance of these items decreased: visits to young and adult class members; importance of local administrator assigned duties; and the importance of local records and reports. The importance of 2 other items decreased slightly: church activities; records and reports above the local school level; and keeping up to date by attending local meetings (4 times, etc.). Two items increased in importance; the coordination of the vocational agriculture program with other agencies; and the importance of being a good neighbor and helping others to everyone.

In summary, we found the importance of several items changed greatly with increased years of experience. We found that the beginning instructors placed much higher importance on some items than experienced instructors, and much lower than experienced instructors on other items. We believe you will be interested in comparing your own set of priorities with those of this group of 203 Iowa instructors. We hope you are better able to organize and set your priorities more effectively by computing your ideas with the one shown in this summary.
A Joint Staff Approach to Meeting In-service Needs

by Arthur Berkey and William Drake

Teacher Education, Cornell University

Increasing Teacher Competency Through Relevant In-service Education

by V. O. Mathison

Consultant, Agricultural Education

Madison, Wisconsin

Quality programs in vocational agriculture/agribusiness are the result of a joint effort. It is commonly accepted that adequate facilities, sufficient financial support, committed support from the administration and the community are essential. The thrust of this article, however, is to focus on the most vital ingredient of a dynamic program - the local vo-ag teacher. To meet student needs, the instructor must have a broad and up-to-date knowledge of the quality preschool college or university educational program. He/she must be an enthusiast, willing to seek new experiences and to learn. Administrators in Wisconsin are graduates of one of the three University of Wisconsin teacher training institutions: Madison, Platteville or River Falls, and remain qualified to prepare young men and women for teaching in production agriculture and agribusiness courses.

The aforementioned strategy, while very successful, did not accomplish all objectives. To provide guided answers to the committee in formulating a long range plan for in-service education, a questionnaire was prepared and circulated along with the monthly vocational agriculture/agribusiness newsletter. Returns revealed many and diverse needs, however, the most pressing need for upgrading instructor competency centered in the area of agricultural mechanics. To assist in implementing a three-year program in agriculture/mechanics, members of the Wisconsin Association of Vocational Agriculture Instructors Curriculum Committee, meeting with consultants from extension and university of Wisconsin staff members, were asked to assist in identifying specific skills needed, develop schedules and select workshops. Currently, plans are being finalized to develop three-day workshops in cooperation with industry, the University of Wisconsin, VTAIB schools, and local high schools.

The University of Wisconsin at Madison, Platteville and River Falls has for several years conducted a relate level education agriculture course for beginning instructors and for those returning to teaching after a short or extended absence from the classroom. Because the class members have both a policy and implementation team functions throughout the year. The steps followed by the Joint Staff in meeting the in-service needs of teachers of agriculture in New York State are described below.

Needs Assessment

A formal technical needs assessment is taken every three years. Each teacher of agriculture is asked to identify his/her area of in-service need from a list of topics that make up the agricultural education curriculum. The topics are grouped by areas of specialization, i.e., Ornamental Horticulture, Farm Production and Management, Agricultural Mechanization, Conservation, Agricultural Business, and Horse Husbandry/Small Animal Care. The ATANY Professional Improvement Program, in cooperation with teacher education at Cornell, conducts the survey. Summarization of the survey is in terms of numbers of teachers indicating a need for in-service education on each technical topic. Other data on in-service needs are provided on a less structured basis through the Instructional Materials Advisory Committee, staff visits to schools, and teacher requests through ATANY in the interim between the three-year needs assessment surveys.

Providing In-service Instruction

The in-service courses are provided primarily during the summer at the College of Agriculture and Life Sciences at Cornell University, the College of Forestry at the University of Syracuse, and at Delaware State University. Certification needs data are available through the New York State Education Data System (NEDDS). The professional courses provided include methods and materials, curricula, and electives, working with the crews, school, groups, youth organizations, and the administration and supervision of vocational agriculture. In addition, special topic seminars and individual study are offered.

These needs assessment data are then used by the Joint Staff to set in-service priorities for the current year and to project a five-year plan for in-service programs. The five-year plan is tentative and provides essential lead time for new programs. An effort is made to provide at least one summer technical course for teachers in each of the specialized areas.

Funding In-service Courses

The Joint Staff-determined priority technical courses are proposed through the Agricultural Education Bureau staff, for funds by the New York State Education Department, Bureau of Instructional Development. Funds provide teachers and persons for teaching in production agriculture and agribusiness courses.

An excellent in-service program, however, is not enough. To changing times, a rapidly changing agricultural technology and a changing world of work dictates that the teacher acquire competence in several agricultural areas.

One of the most successful means of assisting teachers to upgrade their skills, knowledge and understanding is a relevant in-service program. Wisconsin has for many years provided a series of intensive two-day workshops on relevant topics during the annual Wisconsin Association of Vocational Agriculture Instructors summer conference held early in July. This program is jointly planned by instructors from the Department of Public Instruction, the Vocational and Adult Education System and the lead teacher education program from the University of Wisconsin-Stevens Point. In recent years an interdisciplinary approach involving several specialists has provided a greater variety of insight, created a greater awareness of the need, and provided a greater breadth of knowledge than when all presentations were made by one or possibly two specialists. One of the strengths of the workshop concept is that education can be provided to meet today's needs today. To be most helpful to our teachers, the material presented must be useful and practical to their needs. It can be taught, however, at different levels. In face, this in-service program will not carry graduate credit, but will undoubtedly meet Board of Education requirements for continuing education.

Less extensive programs designed to meet the needs of experienced and in-service teachers alike include workshops in land judging, parliament procedure, curriculum, program visits and consultation services for UW Extension, livestock and industry groups. Due to a close working relationship with the above mentioned groups, much relevant material is obtained through participation in these events.

The University of Wisconsin at Madison, Platteville and River Falls has for several years conducted a relate level agriculture education course for beginning instructors and for those returning to teaching after a short or extended absence from the classroom. Because the class members have both a policy and implementation team functions throughout the year. The steps followed by the Joint Staff in meeting the in-service needs of teachers of agriculture in New York State are described below.

(Concluded on page 253)

THE AGRICULTURAL EDUCATION MAGAZINE

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William Drake

The Joint Staff Team

Composition of the Joint Staff includes the four groups primarily responsible for agricultural education in the State: (a) teachers of agriculture represented by officers of their professional association, "The Association of Teachers of Agriculture in New York" (ATANY), (b) two-year agricultural and technical colleges, represented by agricultural division chairpersons, (c) the New York State Education Department Bureau of Agricultural Education staff, and (d) the Agricultural Education staff in the College of Agricultural and Life Sciences at Cornell University.

Meetings of the Joint Staff take place throughout the year as needed to plan and coordinate activities. Chairmanship and secretarial responsibilities rotate annually between the Bureau of Agricultural Education and the Cornell teacher education staff. A number of Joint Staff officers (e.g., the chairman of the in-service program, research) are used to delegate responsibility to provide background information and implementation of Joint Staff decisions. These subcommittees serve to make the Joint Staff both a policy and implementation team that functions throughout the year. The steps followed by the Joint Staff in meeting the in-service needs of teachers of agriculture in New York State are described below.

(Concluded on page 255)
IN-SERVICE EDUCATION THROUGH INDUSTRY

Charles W. Byers and Rodney W. Tallich
Teacher Education, University of Kentucky

In the summer of 1974, the Departments of Horticulture and Agricultural Education at the University of Kentucky joined together to conduct the first annual week-long workshop for Kentucky high school teachers of horticulture. This first workshop focused on floral arrangement and design; the second workshop conducted in the summer of 1975 focused on landscape design. Each of these workshops was supported financially by the Bureau of Vocational Education, State Department of Education.

Need for the Workshops

Kentucky has 30 or more teachers of horticulture, and some 1,400 high school students are enrolled annually in vocational horticulture classes. These teachers expressed the opinion that floral arrangement and design and landscape design should be an important part of the curriculum in horticulture. However, most of the teachers indicated that they had devoted little time to instruction in these areas. A survey of teachers indicated that their training and experience in these areas of horticulture were limited and that they, therefore, were not capable of providing instruction. The teachers expressed a strong desire for workshops to update their skills in these important areas of horticulture.

Objectives of the Workshop — Floral Arrangement

The following specific workshop objectives indicating behavioral outcomes were established. Teachers would be able to:

1. Use basic principles of design and arrangement in making floral decorations.
2. Make corsages.
3. Make centerpieces.
4. Make large vase arrangements.
5. Make small container arrangements.
6. Make basket arrangements.
7. Make set designs.
8. Make spray arrangements.
9. Teach floral arrangement and design.

Objectives of the Workshop — Landscape Design

The following specific objectives indicating behavioral outcomes were established. The teachers would be able to:

1. Determine the need for people trained in landscape design at various levels, what these positions require, and other considerations about careers in landscaping.
2. Use the basic principles of design and theory in making landscape designs.
3. Use the basic principles of the design process in preparing a landscape architecture design.
4. Construct a landscape design for a residence.
5. Determine the materials needed to teach landscape design and to determine the best sources to secure the needed materials.

6. Use effective methods and procedures in teaching landscape design.
7. Conducting the Workshops: The workshops lasted five days with approximately two three-hour sessions each day. Demonstrations or lectures were followed by the participants actually constructing the particular arrangement(s) which had been demonstrated or working on their landscape design. The instructors of the workshops were present to supervise the teachers in their practical work. The "hands-on" experiences were enhanced by an abundant supply of high quality flowers and materials with which the participants could work. The arrangement were analyzed by the instructors who pointed out both their strengths and weaknesses.

In the landscape design workshop, references, pencils, pens, drawing papers, and other materials were provided. The participants took a "field trip" to a home for which a landscape design was to be prepared by each student. Half the class prepared their designs with the assumption that a couple in their thirties with two young children would be the clients. The other half designed that a 65-year-old retired couple owned the home. All designs were explained in front of the entire class, and constructive criticism was offered by participants and instructors. Field trips were also taken to a landscape architect's office and to a nursery, after which participants were armed and contrasted the work that each does.

A JOINT STAFF APPROACH... teacher needs to be met in the technical courses. Almost all of the contributions is the information provided by ATANY vice presidents to teachers in each specialized area about the availability of industry technical service schools.

Evaluation

All credit courses at Cornell University are evaluated by the teachers taking the course as to relevance for the teacher's own classroom. Funded courses are further evaluated through State Education Department staff visits and other assessment requirements for funding.

Summary

The Joint Staff approach to the delivery of in-service education has proven successful in the following ways:

1. Joint Staff planning and cooperation has demonstrated a State-wide coordinated effort. This has been an important factor in obtaining adequate funding support for in-service programs.
2. The continuous needs assessment identifies priorities and keeps in-service offerings "in tune" with teachers needs.
3. Adequate funding is possible because of a State-wide leadership team approach and priorities based on assessment.
4. Instructional staff and facilities are provided by the major institutions with technical departments in the specific areas of needed in-service education. The five-year plan allows lead time for instructional planning.

CONTINUED A JOINT STAFF APPROACH... teacher needs to be met in the technical courses. Almost all of the contributions is the information provided by ATANY vice presidents to teachers in each specialized area about the availability of industry technical service schools. 

Evaluation

All credit courses at Cornell University are evaluated by the teachers taking the course as to relevance for the teacher's own classroom. Funded courses are further evaluated through State Education Department staff visits and other assessment requirements for funding.

Summary

The Joint Staff approach to the delivery of in-service education has proven successful in the following ways:

1. Joint Staff planning and cooperation has demonstrated a State-wide coordinated effort. This has been an important factor in obtaining adequate funding support for in-service programs.
2. The continuous needs assessment identifies priorities and keeps in-service offerings "in tune" with teachers needs.
3. Adequate funding is possible because of a State-wide leadership team approach and priorities based on assessment.
4. Instructional staff and facilities are provided by the major institutions with technical departments in the specific areas of needed in-service education. The five-year plan allows lead time for instructional planning.
Skill-Shops in Horticulture in New York City

George Chrisis, Coordinator, Agricultural and Vocational Education Board of Education — City of New York

THE SITUATION AND RELATED PROBLEMS

Programs in vocational ornamental horticulture in New York City and the nearby counties of Nassau, Suffolk, Westchester, and Rockland have literally mushroomed during the past five years. There was no such program in New York City in 1970. There are now eight programs, with 565 students taught by 36 instructors. Large-scale growth patterns may be found in the near-by counties where there are now approximately 260 enrolled students and 28 teachers.

The initial thrust of the program is to assist our career-oriented students develop the occupational skills necessary for immediate employment. An occupational cluster approach is used so that early in the program "hands-on" experiences are provided by those basic skills common to the particular skill-shop, such as greenhouse operators, nursery managers, landscapers, grounds maintenance, turf producers and managers, arborists and golf course managers. It was soon discovered that there were tremendous variations in the occupational experiences and educational backgrounds among the teachers hired to present these basics. The pressing need in helping the teachers implement their programs was to provide a series of "skill-shop" based upon those occupational competencies teachers wanted experience in perfecting. With the consortium of Mr. Lee A. Traver, Chef, Bureau of Agricultural Education, who arranged for the necessary funding and my colleagues, Assistant Superintendent Frank J. Wolff and Team Leader William Wohler of the Nassau County BOCES, initial plans were formulated.

Some of the related basic problems and considerations were: 1) many of the teachers were on their first teaching assignment or teaching ornamental horticulture for the first time; 2) we did not want to "put on" a program for teachers—a way would have to be found to encourage the teachers to assume the burden of pursuing their own education; 3) teachers frequently expressed concern relating to the demands placed upon them; 4) too often their immediate needs. An example of one small section of the questionnaire follows:

<table>
<thead>
<tr>
<th>1. Retail Florist</th>
</tr>
</thead>
<tbody>
<tr>
<td>A. Sales</td>
</tr>
<tr>
<td>1. Identify horticultural plants</td>
</tr>
<tr>
<td>2. Interpret plant and flower care instructions to the customer</td>
</tr>
<tr>
<td>3. Identify flower and plant insect and disease manifestations</td>
</tr>
<tr>
<td>4. Others (to be filled in by the teacher)</td>
</tr>
<tr>
<td>B. Design</td>
</tr>
<tr>
<td>1. Selecting flowers and foliage for arrangements</td>
</tr>
<tr>
<td>2. Spray painting floral products</td>
</tr>
<tr>
<td>3. Decorating rooms with flowers and plants</td>
</tr>
</tbody>
</table>

The AGRICULTURAL EDUCATION MAGAZINE

CONTINUED SKILL-SHOPS IN HORTICULTURE . . . .

4. Constructing floral arrangements for store sales success with teacher requests. Each skill-shop would start at 9:00 a.m. and terminate at 1:00 p.m.

EVALUATION

Approximately sixty percent of the teachers in the region participated in the skill-shops. Evaluation was really an ongoing process. We were continually on the alert for evidences of skill mastery or at least improved performance and other behavioral changes related to enthusiasm, improved morale, and increased confidence. For example, teachers were permitted to take home any of the floral designs they constructed if it was judged "commercially acceptable" by the instructor. One good clue to the enthusiasm and interest of the participants was the fact that not one left the skill-shop devoted to constructing floral designs until 2:30 p.m. in spite of the 1:00 p.m. official ending.

The teachers were requested to complete a formal evaluation report at the end of the last skill-shop. In addition to what we had learned from the teacher evaluation reports, if we were going to conduct another series of skill-shops we would seriously consider (1) offering the programs during the summer months; (2) making sure the summaries of the skill-shops be in a better position to use what they have learned in conducting their own classes; (2) using actual business locations for the skill-shops to provide as much realism as possible; (3) soliciting "experts" from the 'trade' as instructors, providing an agricultural education staff member assigned and receiving greater satisfaction from the teaching experience. This probably will result in a lower rate of teacher participation and greater satisfaction from the curriculum offerings, and a more relevant FFA program of activities.

CONTINUED SKILLS WEEK

The aid of top-quality instructors is enlisted, drawing upon industry, qualified agriculture teachers and instructors from the Bureau of Education, and Bureau staff members. Care is taken to insure that instruction cooperating with the program are familiar with high school agriculture programs and are cognizant of the needs and kinds of instructional materials necessary in vocational programs.

Depending on the class being offered, instruction may be given by the development of basic skill and/or understanding for the teacher participating in the workshop or it may include development of instructional materials appropriate for high school or community college in order to supplement their existing materials.

The acceptability of this program has been very good, averaging 105 participants in each of the past four years. The entitled may obtain one and one-half quarters of professional credit which will generally contribute toward advancement on salary schedules, but cannot be utilized for degree purposes.

At the conclusion of the Skills Week classes, each participant is asked to evaluate the respective classes in which he has participated. In addition, he is afforded the opportunity of identifying areas in which he would like to see in Skills Week classes being offered the subsequent year.

CONTINUED INCREASING TEACHER COMPETENCY . . .

As the school and community continues to seek for greater satisfaction from the teaching experience, this probably will result in a lower rate of teacher participation and, consequently, increased satisfaction from the teaching experience. This probably will result in a lower rate of teacher participation and, consequently, increased satisfaction from the teaching experience.
The Illinois System of In-service Staff Development

by

R. K. Hofstaden and Allan L. Utech

The plight of in-service staff development is that most educators agree that it's needed, but few have substantive ideas on how to accomplish it. During the past few years, Illinois has worked on the "how to" of effecting meaningful staff development. This article explores the behaviors of vocational instructors, counselors, administrators, and others on the secondary and post-secondary levels.

To accomplish desired changes in the behavior of practicing vocational educators, Illinois has worked toward a system of state-wide and continuous in-service staff development. Illinois teachers and teacher educators of Applied Biological and Agricultural Occupations (ABAO) have been active in all aspects of this program — both in delivery and receipt of this system.

The emerging system has numerous facets some of which include the following:

First, there is cooperation and articulation among the four Illinois universities which educate and re-educate ABAO instructional personnel, and the State Board of Education’s Illinois Office of Education: Adult, Vocational, and Technical Education (AVTE). This articulation maximizes resources by eliminating duplication of services. Services provided continuously by a university are not repeated from a state level. This articulation is accomplished through a joint Council of university, state office, and professional association representatives.

Second, AVTE provides technical assistance to local educational agencies by providing three full-time staff members with expertise on ABAO educational programs. This service provides consultative, individualized assistance required for instructional staff development.

Third, special contracts are written out of the Professional and Curriculum Development Unit of AVTE. During FY 1975, such a contract resulted in the development of seven curriculum guides for contemporary ABAO instructional programs. The guides were developed in the areas of agricultural production, agricultural mechanics, agricultural products, agricultural supply and service, agricultural resources and includes environmentally based occupations, forestry, and ornamental horticulture. That contract was followed in FY 1976 with another contract which disseminated these curricular guides through five, one-day workshops conducted strategically throughout Illinois.

Similar contracts have delivered workshops for inner-city and suburban ABAO teachers, ornamental horticulture teachers, and others.

Fourth, mini-workshops have been presented at each of the last three annual conventions of the Illinois Vocational Association. Over the three years 2,309 practicing vocational educators have participated in 38 mini-workshops on 39 topics of vocational education. The net result has been the provision of 8,229 participant contacts hours of quality in-service staff development. Many of these persons were practicing ABAO instructors who participated in mini-workshops on such topics as utilizing community resources, individualizing instruction, vocational youth organizations, metric measurement, and cooperative occupational education. Approximately one-half of the participants have elected to receive university credit for their involvement.

Fifth, Illinois has attempted to develop alternative vehicles for delivering in-service education. One such vehicle has been a limited enrollment in-service package. Five such packages are constantly available on a three-week free loan basis from AVTE. Packages are available on such topics as (1) Preparing Measurable Objectives for Instructional Programs, (2) Preparing Measurable Objectives for Program Management, (3) Developing and Utilizing Self-Instructional Materials, (4) Metric Measurement in Vocational and Technical Education, and (5) Occupational Safety and Health Act.

Additional vehicles are being developed. Examples include providing correspondence coursework in universities, encouraging and helping teachers to conduct action research on their specific problem areas, and developing "internal" consultants within local educational agencies which can provide local expertise on a problem area, and providing demonstration sites of exemplary educational programs.

Sixth, Illinois is now implementing yet another system for staff development. The SCILL SYSTEM (SCILL is an acronym for Staff Competence in Illinois) provides partial financial support for the conduct of SCILL workshops in 39 topics of vocational education for locally interested topics of in-service education for local vocational educators at their time and place and with their choice of SCILL workshop leaders. The SYSTEM is managed by the Local Superintendents of Educational Service Region (formerly the county superintendent of schools) through SCILL workshop leaders with AVTE.

(Concluded on page 263)

In-service Education for Ag Instructors in Texas

by

Dr. Roger K. Arnold
Agricultural Education
East Texas State University

During the summer of 1975, there were 52 separate in-service workshops offered by the nine universities that have agricultural education programs in Texas.

In-service workshops have long been an integral part of the educational program in vocational agriculture. As a means of promoting this educational program in Texas, nine teacher educators in instruction development offered another summer program of highly specialized and technical in-service workshops for vocational agriculture teachers.

These workshops are on a non-credit basis and are designed to last from two to five days, depending upon the nature of the subject matter. They must, of course, be approved by the Texas Education Agency.

Each teacher is eligible to participate in a maximum of six days of non-credit education workshops approved by the Texas Education Agency, with the approval of the local school administration.

In instances where a teacher qualifies for and attends six weeks of summer school for credit in any one summer, the teacher shall not be eligible for that particular summer to attend non-credit workshops.

Teachers of vocational agriculture are under constant pressure to keep abreast of current changes in curriculum. These curricular changes have been brought about by changing employment needs, local community needs, changing trends in production agriculture, expansion of agriculture-related job opportunities, and changing agricultural innovations. Vocational agriculture instructors must meet these changes with new and up-to-date competencies in order to provide the training that is needed to supply well-trained agriculture employees.

The non-credit summer workshop can provide many of these new competencies needed to prepare the teacher to do a better job of instruction. In-service workshops include many subjects already being taught in vocational agriculture classes; however, new techniques and skills are being added to the teacher's knowledge base to enable him to upgrade his instruction. Most of the non-credit short courses deal with new areas of concern in agriculture not covered during the teacher's formal college training and offers a real opportunity to the teacher to develop new skills and competencies for instruction.

There has been a variety of workshop offered over the Lone Star State for vocational agriculture teachers. During the summer of 1975, there were 52 separate in-service workshops offered by the nine universities throughout the state. Among these offerings were 39 different non-credit workshops offered by these institutions. These in-service workshops were presented on the university campuses using faculty members of the various schools and working with the teachers of the state as resource persons.

Topics for these in-service workshops were:

1. Common Diseases and Parasites of Livestock
2. Preparing Leadership Teams for Contests
3. Animal Reproduction
4. Planting and Caring for Lawns, Shrubs, and Trees

Concluded on page 262

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Vocational agriculture teachers developing competitiveness during a non-credit workshop in Service and Repair of Small Gasoline Engines. East Texas State University Agricultural Education Department.

5. Record Keeping in Production Agriculture
6. Preparing Teams for Pasture and Range Contests
7. Showing Poultry and Training Poultry Judging Teams
8. Swine Production
9. Training Teams for Tractor Mechanics Contest
10. Training Teams for Land Judging, and Pasture and Range Contests
11. Woodland Clinic and Forestry Contest
12. OMA (MIG) and (TIG) Welding
13. Artificial Insemination
14. Service and Repair of Small Gasoline Engines
15. Selecting and Feeding of Show Animals
16. Processing Pork—Freezing, Cutting, and Sausage Making
17. Fruit and Vegetable Processing—Graffing and Grafting
18. Agriculture Mechanics Contest Skills
19. Greenhouse and Vegetable Gardening—Planning and Management
20. Photography for Vocational Agriculture Teachers—Fundamentals and Printing
21. Farm Slaughter and Processing of Beef
22. Weed Identification and Control
23. Poultry Science

(Concluded on page 262)
Leader in Agricultural Education:

JAMES WALL

by Sam Stenzen

Vocational agriculture and the NVATA have always been a family affair at the Wall household. Jim married Georgia Finigan in 1956. Connie was born while they were in teaching at Auroras. The three worked and traveled together whenever possible. With the exception of the 1951 convention, Georgia has attended every NVATA national convention. The Walls have two grandchildren, Lance and Jasmine. Professionally oriented, Jim has served as an officer in the Nebraska Vocational Agriculture Teachers Association, Nebraska NEA Division of Elementary Classroom Teachers, Waverly Teachers’ Association and was an active member in numerous other education, civic, fraternal, service, and farm oriented organizations. He served as an Eagle Chapter delegate to the National FFA Convention in 1929. He has attended 25 national FFA Conventions.

Many organizations have recognized Jim with awards. Those include the Master Teacher Award from the Nebraska State School Board Association, the Outstanding Service Award from the American Institute of Cooperation, and the honorary Farmer degrees from the FFA. He has been named an honorary member of the Alpha Tau Alpha and the American Association for Teacher Educators in Agriculture. Wall has served as FFA advisor to 33 students who became State FFA officers and two who attained the coveted American FFA Degree. Five of his students were elected state FFA officers in Nebraska. His FFA judging teams have won every state contest at least one time during his teaching career.

As the executive secretary for the NVATA, he works closely with the president and executive committee in coordinating the work of the national organization. A major responsibility is keeping the membership informed on trends, problems and developments in the vocational agriculture profession and educational administration.

He has coordinated many activities between the NVATA, the American Association for Teacher Educators in Agriculture, and the National Association of Supervisors for Agricultural Education. Despite his participation in legislative activities on the state and national levels on practically every legislative bill affecting agriculture education, he has coordinated NVATA activities with the American Association for Vocational Education in support of their legislative activities; has disseminated pertinent legislative information to NVATA members; and, has encouraged members to contact their legislators on numerous critical issues. He is constantly concerned about the welfare of vocational agriculture teachers, furthering the cause for vocational agriculture's future, and promoting professional activities through the national organization.

Despite his personal efforts on behalf of the NVATA and agricultural education, his common answer when questioned as to services he offers the NVATA as a professional organization has always been:

(Concluded on page 269)
IN-SERVICE EDUCATION IN VIRGINIA

Stanley R. Burke
Superintendent, Virginia

There seems to be some agreement among educators that current in-service education is virtually impossible for Agricultural Education students to receive all of the technical training needed for one's profession. The need for in-service education in agriculture at the under-graduate level is evident. To a great extent, the need for in-service education is felt by the teachers that they have not received enough and/or adequate training in their degree programs to prepare them to do the quality teaching job expected by their employers and of themselves. To this writer, the difference between the technical training received in service education and the theoretical training in the classroom is great. In Virginia, continuous and extended efforts are being made to identify and provide the in-service training needed by teachers to bridge the gap between the two. This paper presents some of the results of our efforts to provide the in-service education that is needed by Virginia teachers.

IN-SERVICE EDUCATION
The planning of statewide in-service activities for teachers is done through state curriculum committees. Each of the basic, optional and special courses for this program has a curriculum committee, and the committees is to identify, plan, conduct the necessary state in-service education activities for teachers of this program. These committees have from five to eight members with membership representing from teacher education, agricultural instructors and the state supervisory staff. It is felt that the basic and special course activities need to be immediately provided for teachers. The following description relates how curriculum committees are set up and point out some of the difficulties which our in-service programs are facing.

STATE WORKSHOPS
In-service education workshops are centered around the high school courses which are our basic Agricultural Science and Mechanics I and II, optional courses of Agricultural Machinery Service, Agricultural Business, Agricultural Structures, Agricultural Horticulture and Natural Resources Management and special programs for Disadvantaged and Handicapped, and Exploratory Agriculture.

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ability to adjust programs to meet changing needs and/or to respond to changes in instructional staff due to retirements, resignations, or temporary assignments. Different time-frames and sequences ... a few hours or several weeks, not just a few days or academic calendar.

2. Different formats, methods and approaches, from mail-in materials to professional phone "help lines" to workshops and flexible schedule/credit graduate coursework.

3. Varying skill levels and age ranges of subject matter, from technical to professional and, at times even personal. -

4. Mediated/mail materials are invaluable. Mail out (and carry out) materials, largely mediated provide excellent, and relatively inexpensive opportunities for in-service improvement for vocational agriculture instructors. Instructors may become acclimate to such materials as those: 1) Mediated Career information, ... self-training using tape presentation describing 125 different jobs. 2) "Programmed" (slide-tape) agricultural materials or "tape in the Box" Repair of Mobile Home Plus," "Cow/... Adjustment" and "Calibration of the Soil in the Field" or "Electrical Controls" Model are Video-taped "Model Real Reasons for various classes of livestock. Scheduling and following up such materials offer in the in-service staff member entrance for "bridle" phone conversations. These frequently lead

"naturally" into discussions of problems, concerns and needs. The timing of these activities should be such that the topic is "fresh" to talk, any from the school day until the dinner hour. Many have discovered need for solid basic in-service education. The need is logical the first step in program planning. However, it is discussed last in this article for emphasis. It includes, but is more than a checklist of things to do. It is not sufficient for in-service or/and teacher education staffs to provide materials, or to offer a course or conduct a workshop.

In-service education is a personal thing. The teachers are individual learners, and learning is not a one-step activity. All of the above found into the efforts at making in-service education relevant for individual teachers. The in-service agricultural education must get involved early in the cycle... analyze his own situations and prioritize his needs. He should be encouraged to initiate, organize, implement and evaluate his own in-service program. It will be necessary for even the most desirable to have a class meeting or workshop. Instructors of vocational agricultural while noting their own problems often become aware of their individual strengths. They are usually willing to share them with others. Electric and state conferences, contests and conventions provide excellent opportunities to

together, informally, in small groups, and to share competencies, to help develop materials, and to develop new textbooks to meet the changing school needs.

Most improvement in the quality of instruction, as reflected by the modified, improved, and even the new instructional levels, occurs when inputs are made on the individual teacher and he teachers personal application where he is working with his students. For example, the teacher who is unfamiliar with the techniques for insulating a field grove may avoid the topic. But if, by a timely workshop, small group, or "program" - aimed at the teacher's learning how to do the job, he will teach it.

This kind of in-service education requires a belief that "learning-by-doing" is as good for teachers as for their students. Further, it requires a very personal/individualized liaison with each teacher.

In summary, the need for individualized in-service agricultural teacher education exists, and the results are excellent. Effective techniques have been demonstrated. Commitment as well as concrete instructions are necessary even for even the most desirable. Teachers must take the initiative, organizing and implementing their own programs. Often, become aware of their individual strengths. They are usually willing to share them with others. Electric and state conferences, contests and conventions provide excellent opportunities to

get together, informally, in small groups, and to share competencies, to help develop materials, and to develop new textbooks to meet the changing school needs.

HYDRAULICS, by J. Howard Tur- ner, Athens, Georgia: AAVM, 1974, 74 pp., $8.00. ***

This manual has been proofread, re- searched, and written through the coopera- tion of the following agencies: #1) the University of Georgia, ... The authors, all experienced and highly skilled, are to be commended for their


This book is intended as a text of sorts is described. Woods are crop plants grown for food, fiber, livestock or to lower their rate of growth. They increase the price of food. They limit our forests and gardens. They are important to industry. They cause allergies and create problems in recreation areas.

Wood Science covers the biology of woods and wood seeds; plant physiology as related to selective; relationships of horti- cultural and ornamentals; fire and flammability; insect; pest control; forestry; utilization; paper production; and wood disposal. The book has been well received and has sold out.

Next, about modified book the book ex- plains more than 100 herbicides - presenting the general properties, uses, influences on the soil, and modes of action for each group. The text also contains chapters on control practices and special techniques for major groups of crops: vegetable crops; field crops; turf and ornamentals; wood crops grown in the open; nursery crops; small seed legumes; pasture and range; brush and scrub trees; aquatic weeds. There is a chapter on soil residues or total vegeta-

"Wood Science is completely updated since the 1961 edition retitled Wood Use in Science, the book is recognized as a reference for those interested in doing independent research in school and adult education.

- New Special Editor for Indiana, Kansas, Missouri, Kentucky, and Arkansas.

- Dr. William Richardson is Asso- ciate Director of the National Com- mittee Coordinator of Agricultural Education at Purdue University. He completed his BS and MS at the University of Wisconsin and his PhD at the University of Minnesota. Since 1970 he has held positions as acting head of the Department of Agricultural Education. In 1970, the Northeast Agricultural Education in 1972.

- He joined the staff at Purdue University in 1970, where he was named chairman of the section in 1975.

- His responsibilities at Purdue include serving as editor of the Special Methods Course, supervision of students teachers and research.


- Prof. Reuscher, the late professor of law and farm at the University of Minnesota, first edition of 1909, and the Farmer, 1915. Prof. Reuscher kept his work up to date by publishing a new edition in 1915. His book has been revised many times since then. The changes have been reflected in the fourth editions with new material being added by Harold W. Hamann.

- The book is made for farmers by ignorance of the law. Young people being trained for farming receive very little training about how to protect themselves from such mistakes.

- Law and the Farmer is quite readable and the technical terms have been kept well in hand.

- The book deals briefly with the role of law in our society and how our laws are made. There is quite extensive coverage of the legal problems involved when acquiring and maintaining a farm. The book also takes farm land. Another part deals with the relationship of the farmer from generation to generation. The last part deals with the many legal problems encountered in the actual operation of the farm. An example is the treatment of agricultural chemical contamination in the past, and the handling rapidly during recent years.

- The book is well written and contains a valuable reference for those teaching farm management and/or land use courses.

- Harlan E. Johnson, Director Ohio Agricultural Education Curriculum Materials Service.

- NEW SPECIAL EDITOR FOR ILLINOIS, INDIANA, KANSAS, MISSOURI, KENTUCKY, AND ARKANSAS.

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In-service Education

STORIES IN PICTURES

by
Jasper S. Lee

In-service Education

WORKSHOP ON MEAT CUTTING — Earl Cosee (center), Food Indus-
tries Instructor at California Polytechnic State University, shows instruct-
ing agriculture teachers at a workshop on meat cutting. (Photo by W. D. Will, California Polytechnic State University)

HYDRAULIC TRAINER — Jerry Hubbard (right), discusses a hydraulics trainer he designed and built for classroom demonstrations with a colleague during "Ages West," at California Polytechnic State University. (Photo by W. D. Will, California Polytechnic State University)

INSTRUCTION IN FARM POWER — Ray Angulo, Instructor at Clovis (California) High School, is shown using a tractor power pack in teaching agricultural mechanics. (Photo by W. D. Will, California Polytechnic State University)

KENTUCKY SKIT ON COMPETENCY-BASED EDUCATION — A popular feature of the Kentucky Vocational Agriculture Teacher's 1976 summer conference was a skit on "You Are Here — Individualized, Competency-Based Education in Tractor Mechanics." The skit showed students using self-instructional modules and related audio-visual equipment, the role of the teacher, how the classroom should be set up, and the roles of school officials and employers.

"Actors" in the skit were (left to right): M. J. Inverness, University of Kentucky — "World News Reporter;" H. J. Stover, Laurel County High School, London — "The Teacher;" Frank Rowland, Barren County High School — "Guidance Counselor;" E. C. Hance, Monroe County High School — "Superintendent;" C. W. Jones, Franklin County High School — "Agriculture Instructor;" R. G. Bell, Greenup County High School — "Agriculture Instructor;" and M. J. Inverness, University of Kentucky — "Tractor Dealer." (Photo from Maynard Inverness, University of Kentucky)