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Stories in Pictures

GILBERT S. GUILER
OHIO STATE UNIVERSITY



Teachers in Montana Voc. Agr. departments take time for evaluation and planning of programs with students.



School Administrators and teachers of Voc. Agr. in Washington agreed that planning coordination and evaluation are essential elements of success in a multiple teacher department.
Photo by Knox

Agricultural Education

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(picture story page 50)

Featuring SUPERVISED PRACTICE

The professional journal of Agricultural Education. A monthly publication managed by an Editorial Board and published by Interstate Printers and Publishers, Danville, Illinois.

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The Cover

Members of the Agricultural Occupations advisory committee at Batesburg-Leesville High School, South Carolina, are shown above as they discuss course outline and supervised practice programs in agricultural occupation training being conducted by the Vocational Agricultural Education Department at the school. Those in the picture include, left to right, Mrs. E. C. Ridgell, A. A. Murphy, vocational agricultural teacher; J. M. Crout, superintendent; Ellis L. Stockman, principal; and Leroy Cone. Photo—Chastain

Editorials

Supervised Practice or Occupational Experience?



Theory and Practice

Cayce Scarborough

Developing a new concept is the heart of the educational process. Sometimes the new concept may be up-dating an old concept. Some even suggest that *all* new concepts result from a new combination of old ideas. As indicated in these columns in recent months, we sometimes confuse concepts with definitions. That is, we say that we need a new definition when we may mean that we need to develop a new concept.

Let's look more closely at the idea of a new concept being the up-dating of an old concept, as it might apply to the area of Supervised Practice. Apparently the idea of supervised practice as part of an educational program is sound from almost any viewpoint. There are many different ideas about the best way to go about securing this needed practice, but the requirement of laboratory, and many other variations of the idea of supervised practice seem to indicate a feeling of need for some "learning to do by doing." Interestingly enough, this concept holds very strongly for the arts as well as for the vocational areas of education.

In the case of vocational agriculture, the authors of the Smith-Hughes Act took no chances, but wrote the requirement for supervised practice right into the Act. "... that such schools shall provide for directed or supervised practice in agriculture, either on a farm provided for by the school or other farm, for at least six months per year . . ." This concept was continued and up-dated in the Vocational Education Act of 1963 by amending the above as follows: "... any amounts allotted (or apportioned) under such titles, Act, or Acts for agriculture may be used for vocational education in any occupation involving knowledge and skills in agricultural subjects, whether or not such occupation involves work of the farm or of the farm home, and such education may be provided without directed or supervised practice on a farm . . .".

Frequently, agreement is reached on an idea. The difficulty comes when we try to implement the idea. In the case of supervised practice, the Smith-Hughes Act clearly required "supervised practice in agriculture", but this was to be implemented "on a farm". The Vocational Education Act of 1963 continues the same old concept but clearly recognizes the new setting under which the idea of supervised practice in agriculture can now be implemented. That is why the "on a farm" requirement was dropped. Clearly, there is no intent to drop or decrease emphasis upon the need for "supervised practice in agriculture", as some seem to be reading into the 1963 Act.

The above is the basis for the argument that *everyone* enrolled in vocational agriculture should have a supervised practice program. Not just because the law says so, but it makes good sense educationally. In fact, we must keep before us the *idea* underlying supervised practice—the spirit if you will—rather than getting lost in a particular way of implementing the idea. For example, in the early days, the home farm became the focus of the supervised practice program, although the home farm was not mentioned by the writers of the Smith-Hughes Act. Because the home farm was a good place for *some* boys to operate their supervised practice program, we decided that was good for *everybody*. We followed this questionable logic to the point of having boys and teachers join in reporting all sorts of things in the name of a supervised farming program. We can make the same mistake in the broader field of agricultural occupations if we lose sight of the spirit of supervised practice.

It is to keep us close to the spirit of supervised practice in up-dating the old concept in these changing times, that I suggest that we might drop the term "Supervised Practice" and adopt "Occupational Experience." The major reason being that *Occupational Experience* is a more descriptive term of the basic idea of concept that we want to continue than is the old term Supervised Practice. Furthermore, the old term is tied so closely to the earlier implementation in the form of Supervised Farming Program, until it makes it difficult to stretch the term to include the many modern ways of securing occupational experience.

You are invited to react to the suggestion that we substitute the term "Occupational Experience" for "Supervised Practice" in more effectively developing the spirit of "learning to do by doing" in all programs in vocational agriculture in the years ahead. A Letter to the Editor will be welcome, or you may wish to write a Guest Editorial on the subject, if you feel that the subject is worth our further consideration.

Cayce Scarborough

(continued, page 52)

Theory and Practice
(Continued from page 51)

Just about the most optimistic outlook on farming as well as other areas of agriculture that I have seen in a long time was an article by True D. Morse in the Spring issue of *Plant Food Review*. If you haven't seen it you will want to read and think about this article. Mr. Morse makes 16 points, some of them pretty tough, and closes with the following: "Some say 'BOOM AHEAD'—but perhaps the prediction of a 'Golden Age' for agriculture more nearly describes what can be expected for the future."

Someone suggested that we kid nobody except ourselves when we talk about all of the changes we are making, even to the point of having national committees make recommendations, and only make a few minor changes in the wording of some sentences here and there. This is no criticism of the many people who take time from their busy schedules and go to Washington, or some other place, and work on these national "study" (?) committees. Unless major issues, including underlying premises, can be examined and change considered, then it is not likely that much real change will result. Someone has suggested that if you really want to get down to bedrock in talking about objectives of a program, then you must ask the Number 1 question, namely, "Is this program really necessary?" I doubt if many study committees have had this question included in their charge.

Speaking of objectives, E. R. Ryden, University of Maryland, suggests that we need to state objectives in terms less subject to wide interpretations than is usually done. To test this idea, he suggests that you describe the behavior of a person if he has accomplished the objective. For example, probably the most common term used in stating objectives is, "To understand . . ." Well, following Professor Ryden's suggestion, if a person reaches this objective, how does he behave? How does he prove that he understands? How does he differ now that he understands? Yes, that's pretty hard doctrine that Professor Ryden is preaching. I doubt if some of us can join his congregation!

How did you like the new format for the new volume of *AgEd Mag* beginning in July? By using heavier paper and mailing flat, we hope that the magazine gets to you in better shape each month. Let us hear from you.

See you next month.

Cayce Scarborough

GUEST EDITORIAL—

The Vocational Education Act Of 1963 Vision Or Mirage?

ALFRED H. KREBS, Teacher Education, Univ. of Maryland

The Vocational Education Act of 1963 is really a vision; it is a vision of things being done that need to be done. It is a recognition of the many problems facing this country, some of which can be solved by sound educational programs. Unless we are alert, however, the vision may turn out to be a mirage.

The "why" of the Act is a mixture of things for which vocational education is held responsible and evidences of its value. In Illinois, for a recent year, only 3.4 percent of high school vocational program graduates and dropouts combined remained unemployed as of October of the year of leaving school. The comparable percentages of 11 percent (graduates) and 17 percent (dropouts) for all students in the nation are well known. The American Institute for Research nationwide study of vocational graduates revealed, not surprisingly, that as compared to nonvocational graduates the vocational graduates got jobs more quickly, had more employment security, and had similar conversational interests, leisure-time activities and affiliations with community organizations. Vocational education is held responsible for the general problem of youth unprepared for work, yet only five percent of high school graduates complete a vocational program and nearly three-fourths of a vocational student's program consists of general education courses. It would appear that vocational education has not failed; rather, society has failed to provide enough vocational education.

The Vocational Education Act of 1963 was designed to correct the failure of society to provide adequate vocational education by making it possible to broaden existing programs and to develop new programs so that persons of all ages, abilities and interests could be served. This vision may be only a mirage. This country is still not ready for an honest effort to provide the kind of educational program needed by its citizens.

The broadening of vocational programs in many areas is proceeding slowly or not at all. New programs and approaches to vocational education await a hearing while the energies of many vocational educators are expended either in attempting to re-shuffle present programs into some yet unrecognizable pattern or in opposing the reshuffling.

Vocational educators in one subject area publicly promote the elimination of vocational programs in other subject areas.

Curative programs for adults under a variety of public and private agencies are paid for by the federal government through such acts as the Area Redevelopment Act, the Manpower Act, the Trade Expansion Act, and the Economic Opportunity Act. Why should a local school pay for programs for youth that the federal government will later provide free for adults? Even the recent massive federal aid to general education may make it possible for a school to get more federal aid by expanding general education than by expanding vocational education.

People generally appear unwilling to give up having secondary education programs planned first for the college bound. With college as an almost compulsive universal goal of Americans, the 80 percent of youth who will not be graduated from a four-year college still must struggle to achieve in courses planned for the other 20 percent. Time does not permit enrollment in vocational courses.

The problems are legion. It should be obvious to all that the civil war inside vocational ranks and the failure of vocational educators to create new programs can lead only to the development of even more vocational education programs outside the public schools.

If we really want:

1. More vocational programs in the public schools
2. A greater variety of kinds of vocational education programs
3. All students to be able to take some vocational courses
4. To help reduce unemployment through vocational education
5. To help discover, through vocational education, the kind of genius whose creative talents are not revealed by present college entrance oriented programs
6. To give a new richness and meaning to the education of all students through vocational education
7. To help each student develop, through vocational education, qualities of citizenship, appreciation of work, and respect for all fellow human beings—

(continued, page 53)

For First Time—

Now Every Vo-Ag Student Learns Through Supervised Practice

JOHN W. ALLISON, Instructor, South Rowan High School,
China Grove, North Carolina

For the first time, in 18 years of teaching vo-ag, we can reach all students enrolled in vocational agriculture by varied supervised practices in agriculture. Our students are developing more skills and earning more money than any other period of time since the development of vo-ag. Upon completion of high school, our students are ready to become established in a specialized segment of farming, either some agricultural business or pursue additional education thru a technical institute or university.

Out of 113 students enrolled in vo-ag we have 55 engaged in work experiences away from their homes. These work experiences include work on highly specialized horticultural farms, dairy farms, general farms and produce markets.

We consider the experience on our horticultural farms to be the best organized. Our FFA chapter has entered in an agreement with several large producers to furnish the necessary labor over a 5-month period. We think this offers balanced experience as the boys follow tomato farming from the greenhouse to the field and then to market, gaining skills thru greenhouse practices, cultural practices in the field, harvesting and marketing.

Our boys realize they are being graded by the farm manager as well as the teacher of agriculture. Systematic raises in pay when earned get a good effort from all of the students. As students get more experience and exhibit proven leadership, they are used as field



J. W. Allison

supervisors to direct fellow workers.

Financially our work experience students do better than production supervised practice. The students are paid on an hourly rate of pay plus production bonuses. The pay runs from \$350 to \$800 over a 5-month period. Many of our students are using these funds to get more education upon completion of high school.

Planning Supervised Practice Programs

F. R. McCREARY, Teacher of Vo Ag, Monroeville, Alabama

We are experiencing possibly more changes in vocational agriculture during the five years prior to our fiftieth anniversary than occurred in the first forty-five years of vocational agriculture.

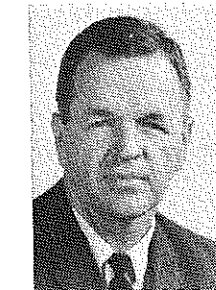
Prior to these last five years, most of the changes have been in methods and materials. Now we are faced with changes in basic concepts and each teacher of vocational agriculture has the responsibility of keeping himself mentally capable to cope with the necessary changes.

In the past we have been able to point to the "Smith-Hughes Act" and state that for the state, county, and other educational units to be reimbursed, it was absolutely necessary that each student

must successfully complete a well-rounded supervised practice program. With this as a stimulus, we were able to usually get a respectable-appearing supervised practice program for our students.

Specialization vs Diversification

During the life of vocational agriculture we have seen diversification give way to specialized production agriculture. This in itself has brought about a change in that the teacher can no longer measure the success of the all-day student's supervised practice program by the number of different kinds of projects carried out by a given student. The economics involved in a diversified farming



F. R. McCreary

program in most areas is forcing those engaged in production agriculture to specialize. Along with the gradual change in specialized production, we find that now we have a definite responsibility in preparing our youth for processing, distributing, and service occupations that are related to agriculture.

Learning to Do & Doing Still Sound

We, in vocational agriculture, stand firmly on the theory that learning is taking place with students when carried through to the doing stage. With specialized production, specialized processing, specialized distribution, we are faced with a challenge in working with students in developing a meaningful supervised practice program. The problem of helping the student who is in production agriculture and desires to continue, will be, as in the past, a matter of guiding him into the best enterprise choice from an economical and interest view point.

(continued, page 54)

Alfred Krebs,

(continued from page 52)

Then, we must:

1. Work to broaden existing programs.
2. Design, or redesign, programs to meet the special needs of youth and adults of all ages.
3. Study the possibilities of developing vocational programs in many additional subject-matter areas.
4. Support the development of area school and post-high school programs with continuation programs in all subject-matter areas.
5. Work together, as vocational educators, to strengthen all of vocational education.

A broad, imaginative effort on the part of all vocational educators is needed. Trying to solve the problems of the nation and of vocational education by re-shuffling present vocational programs into some new pattern and covering it with a new coat of paint may be hazardous. When we finally take time to look at what is supporting the new coat of paint, we may find we have destroyed what we had and have nothing of substance to replace it—and the vision of vocational education for all the citizens of our country will have indeed become a mirage.

Instructional Materials For A Gasoline Engine Unit

THOMAS HOERNER, Pennsylvania State University,
and

RUSSELL JOHNSON, Iowa State University

(NOTE: This article is based on information collected by the authors and on the authors' combined experiences of four years of teaching high school vocational agriculture and six years of teaching in the Agricultural Engineering Department at Iowa State University.)

Does your agricultural mechanics program include a unit on small gasoline engines? One logical way of introducing the farm power and machinery program is through instruction in maintenance and repair of small gasoline engines. An understanding of the basic fundamentals of engine operation is quickly obtained by the student through working on small gasoline engines. Boys at this age are interested in engines and are highly motivated when working with this unit.

The small engine makes an excellent teaching aid because of its simplicity and size. The procedure for maintenance and repair can be mastered in the agricultural mechanics laboratory with little space and a minimum number of tools. It is fairly simple for these fundamentals and procedures to be related and applied to large engine maintenance and repair once they have been mastered through this unit. It is the teacher's responsibility to combine engines, tools, and reference materials with classroom study and well organized laboratory work.

As you plan for this unit in your program a number of questions will confront you, such as: (1) what materials will be needed for effective teaching? (2) what type and how many engines? (3) what tools should be available? and (4) what references are recommended?

Recommendations

Following are some recommendations which can be used as guidelines in choosing items and materials to have available for a teaching unit on small gasoline engines. It is recommended that one engine be available for each two students in the agricultural mechanics class studying this unit. The following characteristics should be considered in selecting engines for this unit:

- 1 cylinder, 4 cycle engines
- aluminum bore
- rewind starter
- horizontal crankshaft
- float carburetor
- air vane governor
- standard bearing
- 2"-2.5" cylinder bore

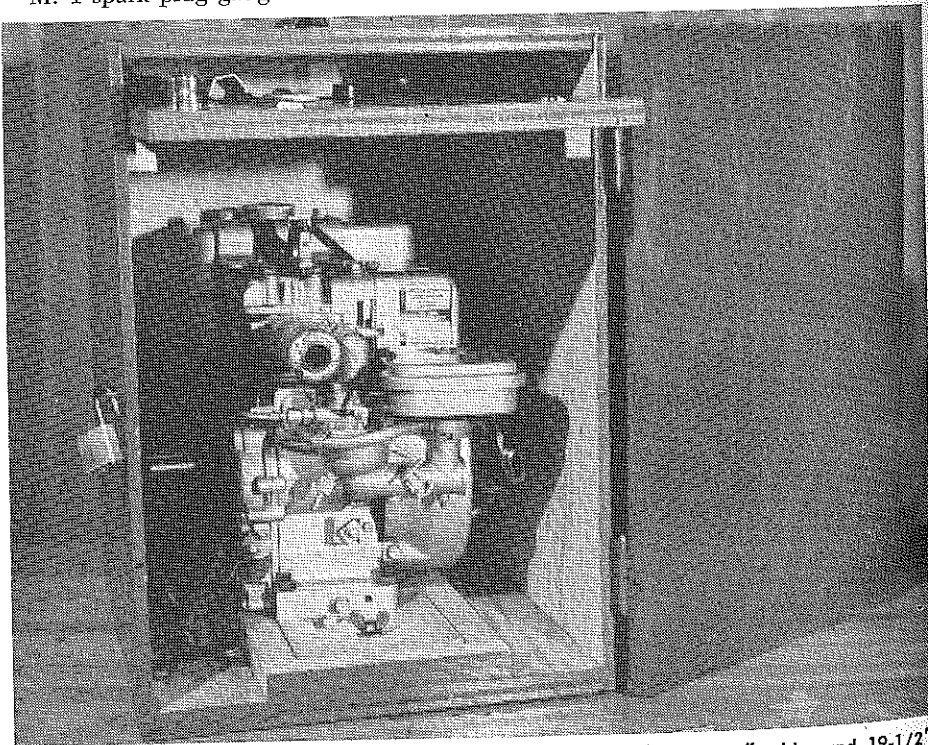


Figure 1. Storage unit for gasoline engine. The storage unit is 18" deep, 14" wide, and 19-1/2" high, outside dimensions.

- 1.5"-2" stroke
- 6.5"-8" displacement.

An individual plywood storage unit as illustrated in Figure 1 should be provided for each engine. This will keep the engine clean and orderly. It will also serve as a storage unit for parts when working on the engine. A permanent base board on each engine as shown in Figure 2 is needed to lock the engine to the base of the storage unit (note—bolt and wing nut) and can be used with a C-clamp to hold the engine to the workbench while starting.

A complete set of hand tools for disassembly and assembly as listed below should be available with each engine.

- 1-4" diagonal cutting pliers
- 1-4" needle nose pliers
- 1-6" adjustable crescent wrench
- 1-13/16" spark plug wrench
- 1-spark plug wrench handle
- 1-5" standard screwdriver
- 1-5" phillips screwdriver
- 1-10"-3/8" drive flex handle
- 1 each-3/8" drive-7/16", 1/2" and 9/16" sockets
- 1-6"-3/8" drive extension
- 1-6" cross bar for flex handle
- 1-9-leaf thickness gauge .001" to .025"
- 1 spark plug gauge .022" to .040"

The tools are stored in a 3/4" plywood tray which slides in and out on 1" x 1" slides at the top of each engine storage unit as illustrated in Figure 1. The tray is two 3/4" pieces of plywood 12-1/2" x 17" glued and nailed together. The top piece of plywood has tool silhouettes cut out so that each tool will stay in place. (Note Figure 3)

In addition to the basic tools with each engine, a number of special tools are needed to adequately teach this unit. A worksheet in which the students use the micrometer to measure the engine bore, the length of stroke, crankshaft diameter, and various other engine measurements is a must for effective understanding of the principles involved in engine operation.

One each of the tools below is recommended for each 2 engines or one tool should be available for each 4 students in the class.

- Micrometer 2" to 3" range
- Telescoping inside gauge 2" to 3" range
- Depth gauge 0-6" range
- Outside calipers 4"
- Inside calipers 4"
- Speed indicator
- Piston ring expander (squeeze jaw type)
- Ring compressor 1.5" to 3" diameter
- Torque wrench 3/8" drive 0-150 ft.-lbs.
- Valve spring compressor (for small engine)
- Flywheel holder (as recommended for engine model)

- Flywheel wrench (as recommended for engine model)
- 1 set nut drivers 3/16" to 5/8"
- Center punch (small)
- Pin punch (1/8" diameter)
- Hammer (plastic face)
- Offset screwdriver

Once the students have mastered the disassembly and assembly of the small engine and have an understanding of the operating principles, they should be given time as part of this agricultural mechanics unit to work on engines from their home farms.

If engine repair and maintenance is going to be done in conjunction with this unit, one each of the following tools should be available for the student's use.

- Micrometer 1"-2" range
- 1 set inside micrometer 2"-8" range
- Wheel puller—3 arms, 5"-6" reach
- Carbon scraper
- Ring groove cleaner 2"-5" diameter
- Valve seat reamer or refacer (small engine)
- Valve grinder, hand 2"-4" range
- Cylinder wall glaze breaker
- Point file
- 1 set screw extractors
- Ignition wrench set 13/64"-3/8"

Materials Needed

Many good instructional materials are available to aid instruction in small gasoline engines. It is advisable to have a complete set of manuals for the engines which you purchase and a repair manual for other more common engines which the students may be overhauling. Many books are published on engine service and some of these should be made available as references. Many of the commercial companies publish and distribute information in the form of booklets or manuals. Slides and flip charts can also be obtained for use in teaching this unit. The following are reference materials and the number of copies recommended for a class of 16 students.

- 4-H Small Engine Project—Unit three. Iowa State University. \$.71. Student Manual. (16)
- 4-H Small Engine Project. Leaders Guide. Iowa State University. \$.89. (1)
- Small Gasoline Engine—Stephenson. Delmar Publishers. \$3.12. Booklet. (4)
- All about Small Gas Engines—Purvis. Goodheart-Wilcox. \$4.50. Book. (4)
- Farm Tractors. Engineering Bulletin No. FT535. American Oil Company. \$1.00. Booklet. (8)
- Small engines Service Manual—7th Edition. Technical Publications, Inc. \$4.65 (1)

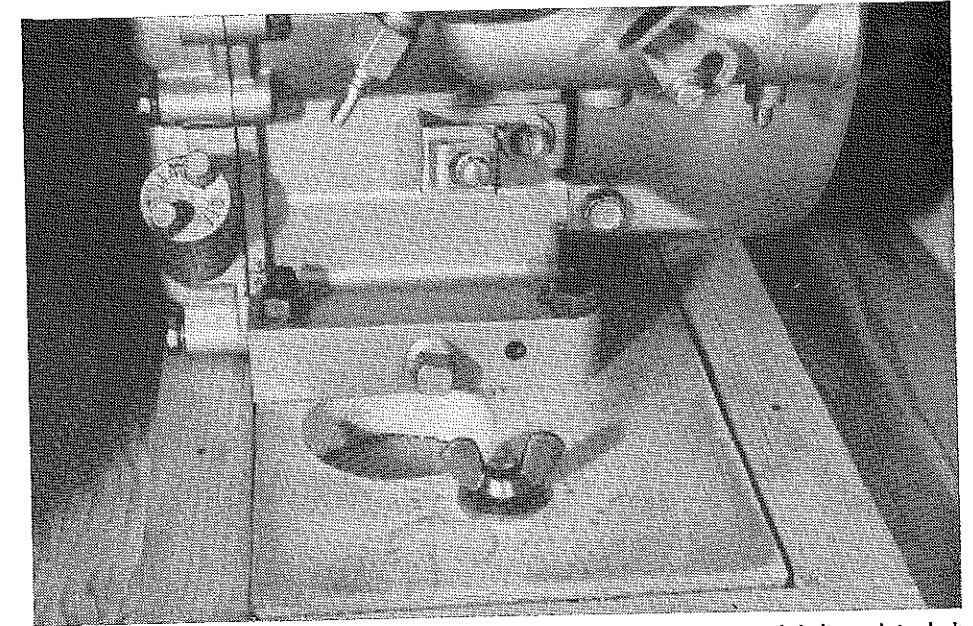


Figure 2. Permanent base board illustrating oil drain hole and wing nut and bolt used to lock engine to base of storage unit.

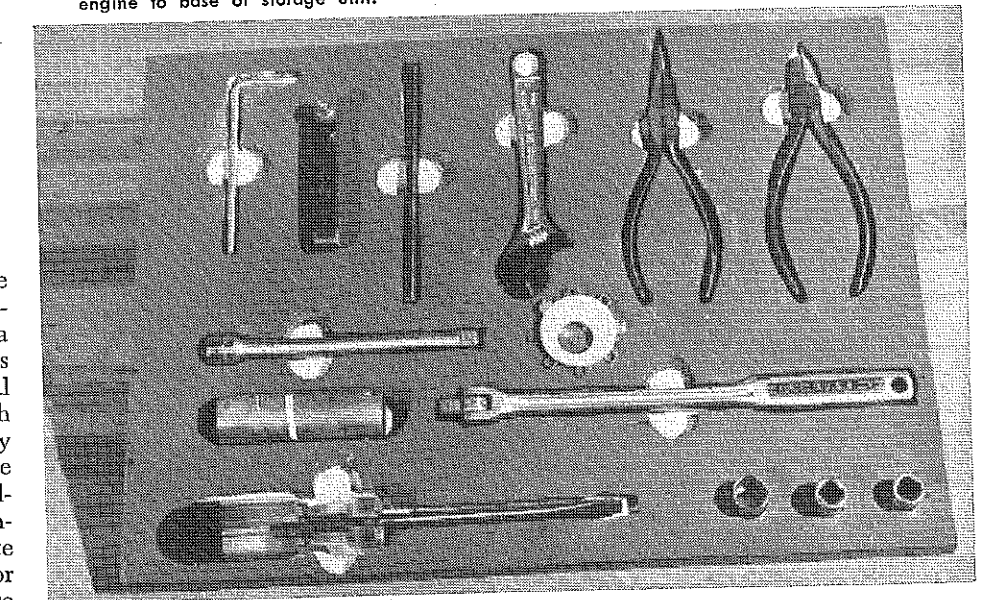


Figure 3. Tool storage tray for basic tools.

- Tractor Maintenance, Principles and Procedures. Sou. Ass'n. Agr. Eng. and Voc. Ag. \$3.25. Booklet. (1)
- Tractor Operation and Daily Care. Sou. Ass'n. Agr. Eng. and Voc. Ag. \$2.00. Booklet. (1)
- General Theories of Operation. Briggs & Stratton Corp. \$.25. Booklet. (8)
- Repair Instruction Manual. Consult engine manufacturer for manuals for respective engines. (8)
- A Power Primer. General Motors Corp. Detroit, Mich. Free (16)
- Know Your Carburetor. Gumout Division. Pennsylvania Refining Company. Cleveland, Ohio. Free. (16)
- Complete Overhaul—68 Slides.

Briggs & Stratton Corp. \$6.80. (1)
N. Flip Charts. Briggs & Stratton Corp. \$5.00 per set. (1)

The gasoline engine plays a very important role in the ever-changing field of agriculture. The teaching of the principles of operation, repair, and maintenance of the gasoline engine is by no means limited to the student who is going to farm. This unit may prove to be even more beneficial to the student who is training to work in one of our many related fields of agriculture. In many schools you, the vocational agriculture teacher, are best trained and will be called upon to teach this unit. These recommendations should aid you in planning and making this unit in small gasoline engines an integral part of your total agricultural mechanics program.

Providing Work Experience For Non-Farm Vo-Ag Students

GEORGE S. WILLIAMS, Vo-Ag Teacher, Andalusia, Ala.

A new approach to work experience programs for vo-ag students is not only urgent but essential to the present role of vocational agriculture. As the population shift from farm to urban areas continues, the number of non-farm students enrolling in vo-ag classes continues to increase. It is generally agreed that the traditional type supervised farm programs too often fail to provide for the needs of this segment of vo-ag students. Since many of these students will benefit from studies in vocational agriculture, ways and means to provide work experiences must be provided.

Our school is a typical case where this problem is acute. It is a three year senior high school in a city of 200,000. It serves both city and rural students. The vo-ag department is a two teacher unit with 132 students.* More than three-fourths of the vo-ag students list a city address. Most of this group lack home facilities for conducting the old type supervised farm programs and many do not need the type work experiences found in a program of productive home projects.

In searching for a solution to the local problem, the traditional type supervised farm program has been retained on an optional basis. It is recommended for most on-farm students and for others interested in productive agriculture. For this group of students it has provided the first business venture and led to farm establishment of too many to be discarded.

At School

It was quickly realized that the school, rather than the home or farm, must provide facilities for work experiences to most off-farm students. Accordingly, several programs are being explored.

A cooperative show calf project was sponsored for the past two years. A vacant dairy barn was located and converted into a feed lot. Each member of the coop shared alike in cost, returns and feeding, fitting and showing responsibilities. This venture provided work experiences for vo-ag students in beef cattle production who totally lacked home facilities for such projects.

*W. C. Locke teaches animal science and livestock enterprises. Geo. S. Williams teacher of plant science and horticulture was at Sidney Lanier High School, Montgomery, Alabama when this article was written, is now at Andalusia, Alabama.

This project has been modified to include several small groups rather than a single large group. The change provides for more individual responsibility and work experiences.

Greenhouse Valuable

A campus greenhouse was placed in operation. It is providing excellent facilities for on-campus work experiences in two classes studying Ornamental Horticulture. The work experiences engaged in by students is recorded daily on an on-campus work experience sheet. A sample copy of this form is shown and the work experiences listed are for a student during the month of September, 1965.

The greenhouse is serving well to encourage individual home projects in the field of ornamental horticulture. In addition to stimulating general interest in plant culture, several students are using the greenhouse to propagate and establish woody ornamental plants that will be finished in containers in their backyards. Bedding plants and perennials are managed in a similar manner.

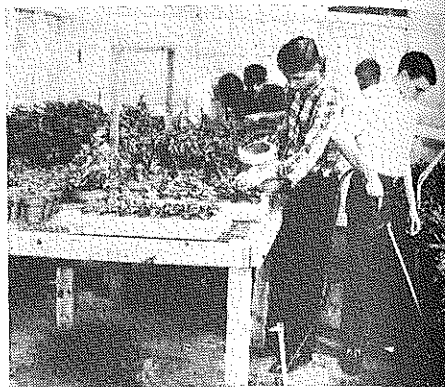
Third year vo-ag students who have shown an interest and readiness to enter commercial employment are recommended for job placement. Placement will be in the areas of greenhouse, garden center, nursery and flower shop operation; and, in feed, seed, fertilizer,

SIDNEY LANIER HIGH SCHOOL
VOCATIONAL AGRICULTURE

RECORD OF ON-CAMPUS WORK EXPERIENCES

NAME:	SEC. 51	
COURSE: Ornamental Hort.	PER. 1st	
WORK EXPERIENCE	REPEATED	APPROVED
(1). Disbudding Standard Mums	X	OK
(2). Mixing Peat-Sand Media For Seed Flats		OK
(3). Assembling Flats		More care in nailing Needed
(4). Fertilizing Mums		OK
(5). Spraying Mums		OK
(6). Sterilizing Soil With Methyl Bromide	XX	good job!
(7). Installing Over-Head Light Circuit	XX	good
(8). Planting Pansy Seed		OK
(9). Weeding Woody Plants In Shade House		only part of period
(10). Potting Rooted Cuttings	X	OK
(11).		
(12).		
(13).		
(14).		

NOTE: (1). Enter all campus work engaged in for the major part of a period.
(2). If work continues into the major part of another period indicate by check in "repeat" column.
(3). The right hand column is for teacher use.



pesticide, livestock marketing and food processing. Work assignments are for after school hours, weekends, holiday and vacation periods. The teacher recommends the student for interview with employers and working agreements are formed by the student and the employer. The vo-ag teacher selects employers and has general supervision of all on-job training.

Summary

Summarizing, the traditional type supervised farm program is being supplemented by several work experience programs designed primarily for non-farm students enrolled in vocational agriculture. The supplements are providing for work experiences for a group of non-farm students who enjoy working with plants and animals. Time will tell if the supplements prepare students for careers in the broad field of agriculture. If not, other approaches must be devised as preparation for agricultural careers is the prime role of vocational agriculture.

"Agriculture, Agribusiness and Vocational Agriculture"

LOUIS H. WILSON, Vice President for Information, National Plant Food Institute*

Talk given to NVATA, Miami, Florida, Dec., 1965

Inherent in all of us is the desire to work for advancement, promotion of our professions, to fight for what we believe is right, to help the weak grow strong, and the strong to grow great in the best traditions of the American private enterprise system.

Within this concept, there is the continual imbalance that can be attributed to constant change. In fact, without this concept, our jobs and our future would be exceedingly dull and suffer from lack of imagination.

Right now, as you know, vocational agricultural education is facing considerable change. The challenge to you is to adapt to that change and still retain those essential parts of vocational agriculture which have contributed so greatly to the development of American agriculture as the bellwether for the world in efficiency of food and fiber production.

The fact that U. S. farm population is becoming smaller increases the importance of the farmer in our economy and magnifies the role of those who teach and serve in his industry. In fact, with diminishing farm population, agricultural efficiency becomes even more vital to farm production and agricultural leadership takes on increased significance.

Expanded urban interests in education are forcing realignment in a great many governmental services and educational programs. Even so, agribusiness looks to the vocational agriculture instructor to continue to tailor his teaching so that young farmers will have the best training possible, the best tools available, and the agribusiness leadership necessary to extend this nation's envied position as the best fed, best housed, and best clothed in the world.

*National Plant Food Institute home office is 1700 K Street, N. W., Washington, D. C. 20006.



Don't Wait

Some reorganization of programs in the area of your interest may still be in the controversial conference and experimental stage. But don't wait for a hopeful outcome. Get the facts yourself. By all means, support your leaders in their efforts to provide direction. Don't be satisfied with the immediate impact of change, but look to the future impact of remodeling and experimentation, keeping in

mind the importance of maintaining a strong economy, and, particularly, keeping agriculture strong productive and efficient.

Vocational agriculture has many friends, but they are no more effective than your communications—than the facts you provide to support a sound position that justifies enthusiastic support. In the big, important, and growing educational family, there are always some who are over-zealous to "follow" (continued, page 62)

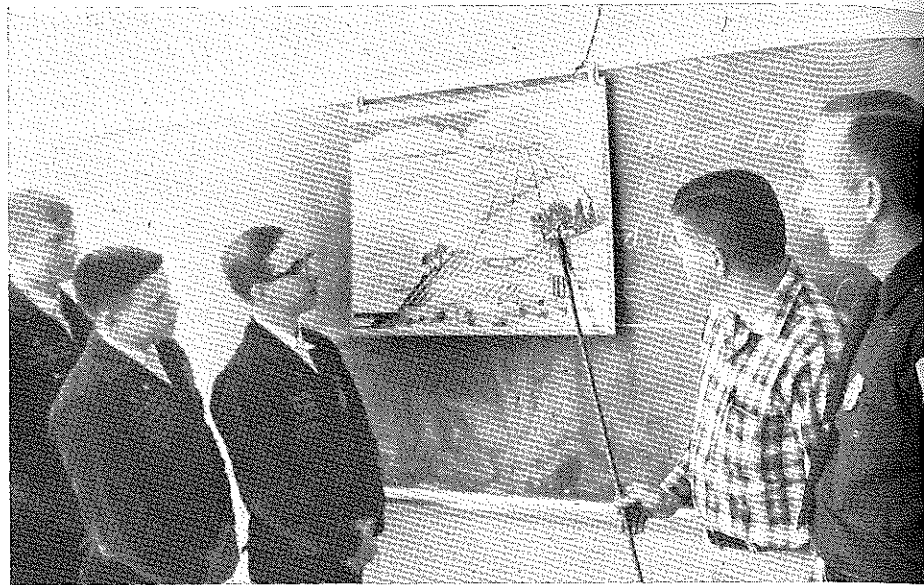
BIO-AG ED

A rapidly growing associated field of agricultural education is the biological sciences. Many colleges, schools and departments of agricultural education are making major curricular adjustments to meet the biological science needs of future agricultural educators. However, there has been little opportunity for meaningful exchange of ideas about requirements in the biological sciences among teacher educators in agricultural education and related sciences in different institutions.

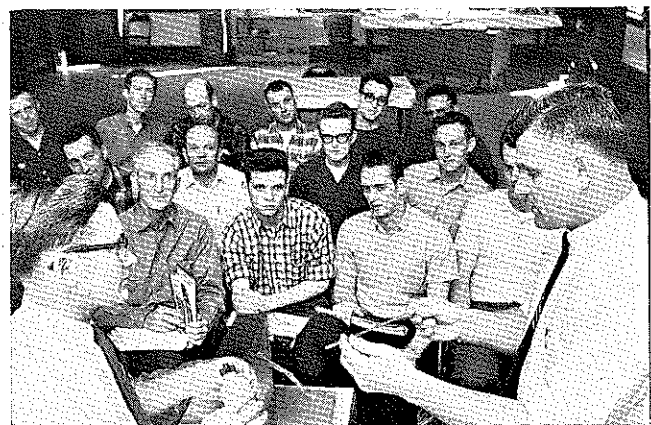
Seven action committees to study, report and recommend desirable instruction in the biological sciences for undergraduates majoring in agriculture and related sciences were recently formed. One of these committees was the Biological Sciences Action Committee on Agricultural Education. Four of the committee members are: Joe P. Bail, Cornell University; Lloyd J. Phipps, University of Illinois; Orville E. Thompson, University of California at Davis; and Robert E. Taylor, Committee Chairman, Ohio State University.

The committee was charged primarily with recommending desirable instruction in the biological sciences for undergraduates majoring in agricultural education. A secondary goal was to recommend courses in the physical sciences and mathematics required for the instruction in the biological sciences. Representing the related fields in biological sciences for agricultural education were: Dr. R. H. Westveld, School of Forestry, University of Missouri; Dr. Thomas J. Stanly, Applied Science, Francis T. Nichols State College; Dr. Grover C. Miller, Department of Zoology, North Carolina State University; and Dr. A. R. Hilst, Department of Agronomy, Purdue University.

The report of the Biological Sciences Action Committee on Agricultural Education, along with reports from the six other action committees, will be summarized into a single position statement. The position statement will then be reviewed by professional societies, modified, discussed during a conference of deans, directors of instruction and faculty members; modified again and distributed widely. The present timetable calls for distribution of the completed report to scientists and educators in biology, agriculture and related areas on January 1, 1967.—Robert E. Kerwood, Graduate Associate, Ohio State University.



Vocational agriculture students of Tunstall "Keep Virginia Green" receive up to date instruction in their curriculum on fire control from their state Foresters. Photo—T. D. Burgess.



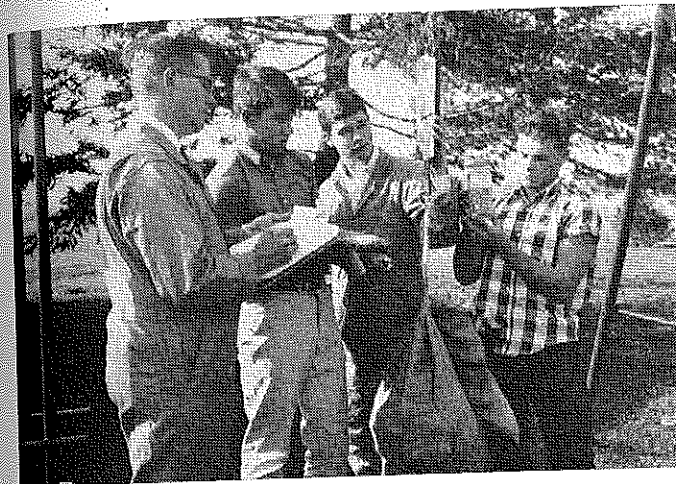
A Minnesota class in the man power program receiving instruction in artificial insemination. Adults take time to prepare themselves for employment in agricultural related fields. Instructors shown are Mr. James Witte and Dr. Frank Rose.



To round out the experience program in this non-farm agricultural business, Roger is selling ornamental plants to a customer. Photo by St. John

Stories in Pictures

GILBERT S. GUILER
OHIO STATE UNIVERSITY



The Vocational Agriculture students at Cloverleaf Senior High School, Lodi, Ohio are conducting corn yield checks on their projects. Mr. Tom Welli, a student from the Ohio State University along with Mr. Weir are supervising these yield checks.



Vice President Humphrey receives the Honorary FFA Degree charm while visiting the Minnesota State Junior Fair Livestock Exhibits. Photo by Kortsmaki.



Gary Swenson, FFA president, Stillwater High School, in Minnesota, is shown cob-feeding a hog that officially kicked off Minnesota Pork Week. Governor Rolvaag of Minnesota presented the pig to the Stillwater FFA Chapter to raise. Proceeds from the hog will go to the chapter treasury. Photo by W. J. Kortsmaki.

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