

REPORT OF CONFERENCE
OF
CONSULTING COMMITTEE ON THE TEACHING OF FARM MANAGEMENT

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F O R E W O R D

A major problem confronting today's farmer is how to organize and use available resources to produce maximum financial returns. The rewards for superior management of American farms has never been greater than at present. At the same time, the cost of inferior management has never been so destructive. The survival of the independent farmer depends more and more upon his ability to manage his enterprise skillfully.

It is imperative, therefore, that vocational agriculture give emphasis to training in efficient farm management. To focus national attention on this phase of vocational agriculture education, a group of consultants was convened in Washington, D. C. August 27-29, 1952, at the request of the Division of Vocational and Technical Education, U. S. Office of Education.

The report of this conference is herein presented. Acknowledgment is made of the valuable contributions from all participants and from the many State staffs of agricultural education who provided teaching materials for review by the consulting committee. Materials were drawn together by Harold F. Duis, agricultural education specialist, U. S. Office of Education, with the assistance of staff members of the Vocational Agriculture Branch.

This report does not constitute an official position by the U. S. Office of Education. It is, rather, a summation of the suggestions and recommendations of the consulting committee, and, as such, has its own unique value.

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REPORT OF THE FARM MANAGEMENT CONFERENCE

Statement of Purpose

A brief history of education in agriculture was given by Dr. Tenney. Attention was called to the fact that a great expansion of young farmer and adult farmer education is needed since today less than eight percent of the farmers are enrolled in vocational agriculture. The training areas cited as needing additional emphasis were:

1. Farm management
2. Farm power and machines (technology)
3. Agricultural sciences
4. Post high school training in agriculture

The great need for training in farm management and for focusing attention on this area was emphasized. The experience of vocational educators with the Institutional on-Farm Training program for veterans has indicated that it is possible through training farmers to improve the efficiency of their operations and to increase the scope of their programs. In recent years several States have made substantial progress in farm management training through day school, young farmer and adult farmer classes, with similar results. The conference was called to determine what has been done, what needs to be done, and how to implement further development. Specifically the purposes of the conference were outlined as follows:

1. To stimulate interest in the farm management approach to teaching vocational agriculture in all types of classes.
2. To review techniques used in selected States in teaching farm management.
3. To assist agricultural educators in developing useful procedures in securing data from farmers in the form of farm account records.
4. To develop procedures for analysis of farm records.
5. To develop procedures for implementing instruction in farm management.
6. To explore the possibility of attaining national or regional unity.

7. To investigate the possibilities of using electronic data processing computers in analyzing farm records.
8. To determine the research needed in the area of farm management.
9. To determine the publications needed in implementing the farm management program.
10. To determine the preservice and inservice training needs in the teaching of farm management.

WHAT HAS BEEN DONE

The participants described what had been done in farm management in their respective States. The following statements summarize the principal features of, and observations on, their programs:

Current Situation

Maryland

Two inservice workshops were conducted on a credit basis for teachers. The first one was held four years ago with Dr. Milo Peterson of Minnesota as the visiting instructor. The teaching of farm management in the high school programs is often academic. To overcome this, an elementary manual was developed in farm management which has improved day school farm management training but adult programs have not developed as hoped. Actually, only three teachers have good farm management programs for adults.

Mr. Reiley, a full-time adult instructor in Frederick County gave details of his farm management program. There are seven regular vocational agriculture teachers in the county. The philosophy of farm management was expressed in a poster which states: "Given enough accurate information one can't help making sound decisions". This program has been going for one year. Two meetings, of two hours each, are held each month for adult farmers in four different centers. From sixteen to twenty-five persons are enrolled in each center. Individual work with farmers includes: analysis of records for which a charge of \$20.00 plus 50 cents per cow is made, help with filing income tax reports, visits to farmers at regular intervals, conferences with farmers in the teacher's office and assistance in improving farming practices.

It was emphasized that a successful program in farm management must include immediate monetary savings and complete accounts and current records as basic.

Minnesota

The farm management service program has been in operation nine years. It was developed largely as a result of the Institutional On-Farm Training Program which required records. The University and Extension Service cooperated and for five years analyzed the Institutional On-Farm training records. Presently six area schools, started in 1954, provide farm management training assistance. A fee of \$21.00 is charged for those who desire their farm accounts analyzed. Eighty-one schools are conducting farm management classes for 1,700 students this year. In some cases both the farmer and his wife attend. Forty full-time adult instructors, including eight area coordinators, work with the farm management program. For a full-time adult instructor the class load is 1,200 hours, distributed 20 percent in the class room and 80 percent on the farm. There are four steps or levels of farm management training for adults, including a three year course plus a fourth year or seminar group. The seminar group meets less frequently than those enrolled in the three year course and requires only a small amount of the teachers' time.

All work in farm management is arranged through the local boards of education, using the vocational agriculture department advisory committee. The teacher makes a survey of agriculture in the community and presents material showing the financial value to the community. Time must be provided by the school administration for teachers to handle adult farmer classes. The teacher must train farmers to make decisions rather than actually making the decisions. In order to do this he must have an understanding of business economic principles as provided in the college training. It was noted that there is a marked carry over from the adult classes in farm management to the day school classes.

Dr. Nodland is in charge of the University Farm Management Service which operates two separate associations for farmers. A farmer can hire this service and have his farm accounts analyzed cheaper than he can do it himself. Management involves both organizational and operational problems in minute detail. In beginning a farm management program it is necessary to start with simple, easy problems, then progress to more difficult ones. e. g. How much fertilizer should a farmer buy? (easy) How to keep and analyze records? (difficult) The course must begin with individual problems and must consider economic principles in making all decisions. A farmer's personal desires must be considered. Dr. Nodland noted that a marked improvement in farm management has been apparent through the day school contests in that area. Likewise, a drastic change has been made in teacher training as to farm management emphasis, which resulted from experiences gained from work with farmers.

Virginia

A lack of farm management teaching was noted 15 years ago. Because teachers did not feel competent to teach farm management, the college developed a training program for undergraduates to give the teacher confidence and to include experiences that made him feel capable to teach farm management.

It became necessary for the college to specifically train a person to assume the responsibility for upgrading the farm management instruction. Inservice conferences are conducted for teachers, using economic factors of an actual farm to make decisions of management. Teacher Education and Extension Service cooperate in, and share, the farm management training responsibility. Data are used from 500 farms that keep records which are processed by IBM. It is their opinion that records should be an outgrowth of other instruction and a young farmer or adult farmer class should not begin with records and record analysis. The unit of record keeping and analysis should be conducted in a relatively short period of time - not over 10 to 12 weeks. A laboratory farm has been selected in each of three areas in the State for use in the upgrading program. Nine steps are used which a teacher can follow in his analysis of the farm under study. In selecting the demonstration laboratory farm consideration is given the following:

1. The local vocational agriculture teacher provides the prospects;
2. The farm management teams (staff members) from the College of Agriculture go to the community and help the teacher make the selection;
3. Farmers are not paid for use of their farm as school laboratories;
4. Usually one demonstration farm is needed for each 12 to 15 teachers in a district for their specific inservice training work;
5. Later each teacher may select a demonstration farm for his requirement.

Texas

The Vocational Agriculture Service, State Department of Education employs 12 specialists in nine subject-matter fields including welding, electricity, entomology, tractors, swine, beef, crops, dairy, and farm management. These men are located in colleges such as Texas A. & M. They conduct short courses for groups of farmers which are organized by teachers of vocational agriculture. A fee of \$3 to \$5 is charged the farmers for supplies. The local teacher gives follow-up service to the group. The ten area vocational supervisors promote the organization of classes among the teachers. Usually each specialist conducts three

short courses within a month. Each course is approximately one week in length, the class meets approximately two hours per session, and enrolls from 13 to 16 farmers. The chief purpose of the short course is to stimulate interest but the local teacher must capitalize on this interest. The fact that the specialist is not personally acquainted with individual farms and the farmers' problems is a major weakness of the plan. Also, many times the approach may be too academic.

Tennessee

In 1953 the University of Tennessee started a three-weeks off-campus summer course in farm management. This was a practical course and staff members from several of the technical departments were used. In 1954 the course was repeated in another section of the State. In 1959 two and a half days of the Annual Summer Teachers Conference were devoted to farm management. In 1961 teachers at the summer conference were allowed to tell of their accomplishments in the area of farm management. In this year also the Agricultural Extension Service began holding a series of eight meetings per center, of two hours each, throughout the State. These were for farmers but local teachers also attended. Fifteen centers conducted meetings that year and this was increased to 20 centers in 1962. Since 1961 vocational agriculture has done very little in promoting farm management classes because this was done by the Extension Service.

A recent survey of teachers (23 teachers responding) revealed the following:

- A. When are you teaching farm management?
 - 1. Some teaching it to Vo-Ag I;
 - 2. Ten teaching it to Vo-Ag III and IV.
- B. What are you teaching?
 - 1. Many different things - (44 in all);
 - 2. A few mentioned production goals;
 - 3. Some state, "I've been teaching something called "farm management" but I don't know what it is and I probably wouldn't recognize it if I did";
 - 4. Teaches crop enterprises but gives them an economic slant.
- C. Follow-up visits:
 - 1. Difficult to follow up day school boys on farm management;
 - 2. Adults are easier because they are more involved.

D. References used:

1. Doane materials;
2. Internal Revenue;
3. Extension publications;
4. Textbooks;
5. State Department of Vocational Agriculture.

E. What do you think of the Extension Service schools on Farm Management?

1. Helped sponsor them;
2. Attended as a member of the class;
3. Enrolled my adult class in them as a group;
4. Best instruction my adult class ever received on farm management;
5. Excellent instruction;
6. Very interesting class.

F. What about farm management for high school boys?

1. They lack background;
2. Not ready for follow-up;
3. As a teacher, am not prepared to teach farm management.

G. What help do you need to teach farm management?

1. A conservation plan for every farm;
2. More group planning by teachers;
3. More time;
4. More accurate data;
5. Special instructor.

Note: It was interesting to note that no teacher indicated he may need more inservice training himself to help him do the job.

H. Other findings;

1. Fifty-four percent included something on farm management in their day school courses;
2. Forty percent included something in farm management in their adult classes;

3. Six percent included it in young farmer classes;
4. Of the total instructional time devoted to farm management, eighty-seven percent was to day school students, eleven percent to adult farmers, two percent to young farmers.

Mississippi

The State has been giving attention to farm management for many years. Most of the instruction has been with adult farmers. There are 340 vocational agriculture teachers in the State and all are required to teach young or adult farmer classes. The teachers devote a half day to day school classes and a half day to young and adult farmer classes.

In providing preservice training in farm management use is made of a demonstration farm. All types of inservice training in farm management are used including workshops, summer courses, and conferences. Soil Conservation personnel and Farm and Home Administration have helped extensively. A great deal of effort has been made to develop farm management programs and record analysis but progress has been slow. Approximately 300 of the 30,000 farmers enrolled in adult classes are keeping records as a part of the instructional program in farm management.

Recently a core curriculum (course units) on farm management was developed in the State for high school students and adult farmers.

New Mexico

Since State laws prohibit adult courses in the State, farm management instruction has been concentrated in the day school courses of study. Approximately 74 days of instruction are recommended in the third year and 85 days in the fourth year. Some teachers do not have an adequate background of training and therefore, think the high school students are too immature and inexperienced to be taught farm management. Units of instruction include wills, agreements, taxes, and conservation. The staff receives much help from other agricultural agencies in developing the unit of instruction.

The staff holds workshops for teachers on farm management and plans are being made to set up off-campus graduate courses in advanced farm management. It is recognized that inservice training is useless unless it is followed up by adequate staff supervision.

Colorado

The State began a farm management program in 1958 with the release of two publications including appropriate teaching units and farm and

home planning. The State University conducted a graduate program for vocational agriculture teachers with the assistance of Farm and Home Administration personnel. A demonstration farm was used in the course. Many agencies have helped in developing course outlines and units in farm management applicable to their specialized fields, such as conservation, credit, and insurance. Techniques which may be used in teaching various units have been identified. Approximately 25 percent of the teachers have followed the farm management pattern in the adult and young farmer classes. At the high school level recent developments include the preparation of a comprehensive list of jobs (units) in farm management to be taught at the junior level and the provision of a guide for use by students in studying a farm.

In evaluating the program thus far, the following difficulties are recognized:

1. The nature of single enterprise farming, which makes such farmers less interested in management and planning than are diversified farmers;
2. The differences in level of education;
3. The natural dislike for budgeting and paper work;
4. The lack of time by the teacher to follow-up members in developing plans.

Ohio

In the high school program 14 percent or approximately 40 days of the total teaching time in the Junior and Senior years is devoted to farm management. The demonstration, or case farm approach, is used. Farm management is more meaningful to a boy who lives on the home farm or is on-farm placement, than the boy who has only one or two small projects. The State has developed a guide for teaching farm management.

In the out-of-school programs it is recognized that there are too many "shot gun" courses and also too many "short courses" to be effective. Ninety percent of the teachers have young or adult farmer classes but there are only three full-time instructors for adults. In the farm management programs teachers visit the farmers four times as much as in other programs. It was recognized that farmers must have a purpose in keeping records or they will not keep them.

Recently inservice workshops were conducted for vocational agriculture teachers, Extension workers, Soil Conservation Service workers, and others. In these workshops it was agreed that each teacher should work with eight to ten families on a farm management program. The County

Agricultural Agent would serve as a coordinator and would secure the services of specialists when needed by the teacher. Courses would begin with a general problem, such as "What do you want out of life?" and then go on to problems such as "What will be the results if I make certain changes?" The Agricultural Education Department also provides a three-hour graduate course which enrolls 20 students. This course uses a case study and goes through the whole process in farm management as well as the development of teaching units. Plans are presently being made to employ a farm management specialist on the agricultural education staff for inservice training.

U. S. Department of Agriculture

Mr. James Vermeer served as a consultant during the conference and made the following statements:

1. Teachers must understand principles of agricultural economics.
2. A laboratory farm is essential in teaching.
3. Farm management is difficult to teach to high school students unless they have a stake in the farm business.
4. Since instruction in vocational agriculture is moving towards teaching farm management to adults, it is essential that teachers know the techniques with which to do the job, e. g. partial budgeting, analysis, etc.
5. To most farmers his own labor is his most valuable resource.
6. A baffling problem is deciding what instruction should be provided to those who are not going to farm.

EVOLVING PATTERNS IN FARM MANAGEMENT EDUCATION

It is evident that a number of different patterns are evolving farm management education. There is a trend toward special full-time adult instructors and more teachers being allotted time for adult and young farmer education. Several States are emphasizing farm account records and analysis as the approach to teaching farm management.

The participants in the conference stressed the need for tying the teaching to the farm.

Three patterns, varying in approach, were identified in the program:

1. Farmer business analysis:
 - a. Individual farm (family) - an organized training program of three or more years;
 - b. Case farm.
2. Teaching economic principles by using actual situations.
3. Teaching farm and home planning by using budgetary controls (case farm and individual farm).

In analyzing the three patterns, a number of advantages and disadvantages were indicated.

1. Farmer Business Analysis

a. Advantages:

- (1) High intensity of instruction;
- (2) Increase in on-farm instruction;
- (3) Farmer applies principles to his own situation;
- (4) Stimulates better records;
- (5) Flexibility.

b. Disadvantages:

- (1) Small number served;
- (2) High cost per student;
- (3) Success is dependent upon farmer confidence and cooperation;
- (4) Teacher may be reluctant to pry into business of the farmer.

2. Teaching Economic Principles

a. Advantages:

- (1) Saves teacher time;
- (2) Reaches larger numbers;
- (3) Gives student an early understanding of what he is getting into;
- (4) More reference material available;
- (5) Gets acquainted with terminology and understanding of the "why".

b. Disadvantages:

- (1) There may be a tendency to overemphasize the academic approach at the expense of practical application.
- (2) Principles may not be specifically applicable to farm operations.
- (3) Many farmers may not be attracted to this type program.

3. Farm and Home Planning Using Budgetary Controls

This approach has two advantages. It gives the farmer a picture of his potential farm operation and control of his business; and it gives him an understanding of interrelations of the total business.

For the day school program two patterns were listed:

1. A book type program in which economic principles are taught. Students are taught to know about, but may not know why.
2. Farmer business analysis; using an unidentified farm, a case farm or the individual family farm.

There is a good carry over from the adult program in farm management to the day school program.

Farm Management Defined

Several definitions of farm management were offered:

1. "The application of economic principles to the organization and operation of a farm."
2. "Maximizing returns from resources." (to management)
3. "Employment of the economic approach to the interrelated problems of the whole farm business for maximum returns."
4. "Ability to make evaluative decisions based on the individual's actual economic situation."
5. "Decisions - What to do, how to do it, what to do it with."

WHAT NEEDS TO BE DONE

Farm Management "Tools" Needed

For the farm management approach to teaching, tools such as the following would be needed:

1. Inventory of resources:

Labor, capital, land capability, availability of credit, machinery and equipment, land, other personal property.

2. Input and output data (current):

Production ratios (feed per unit);
Performance ratios (standards of production).

3. Goals of the family:

Production, efficiency, economic, social, etc.

4. Operator's analysis: How do we reach our goals?

Increase efficiency;
Expand our business (volume);
Change organization if necessary;
Look for possibilities for joint activities (cooperatives);
Make use of governmental programs;
Secure outside or off-farm employment to supplement income.

5. Decision-making:

- a. Budgets - (added costs and added returns from an alternative) must use current information, such as prices, to make an effective decision;
- b. A program of work for farmers should be developed to cover a period of years;
- c. Volume of business measured by:
 - (1) Man work units;
 - (2) Gross income.

Basic Record-Keeping Needed

The records which are basic and must be kept for farm management instruction include:

1. Inventories (farm) - net worth statement;
2. Farm purchases and farm sales;
3. Production records - physical quantities such as: births, sales, yields, feeds consumed by classes of livestock, livestock numbers;

4. Family living from the farm;
5. Record of family living expenses; (optional)
6. Documentary records;
7. End-of-year summary.

The advisability of developing a standard record book on a nation basis was discussed. It is questionable whether farm economists of the Nation would agree on a standard record book. Certain basic records should be kept by farmers in all States but each State will continue to use the book best suited to its needs.

Summarizing Farm Records

Five methods are being used for summarizing records:

1. By a farm management service -
About two or three hours are required to close the record book and 11 hours in the office to complete and analyze the record. A fee is charged for the service which includes clerical help.
2. By the teacher -
A clerk with training can be employed to close records after checking by the teacher. A fee is charged for this service.
3. By the farmer -
Several States will attempt to teach farmers to close their own records. They must, however, be checked for accuracy by the teacher.
4. By electronic data processing equipment -
The Department of Vocational Education in cooperation with the Extension Service in Nebraska has a pilot project which is working fairly well.
5. By area vocational schools -
Minnesota uses this plan. A fee of \$21.00 is charged for this service. Local teachers cooperate with the area school coordinator.

Farm Analysis Reports

It was agreed that record analysis similar to that used in Minnesota was desirable and essential. This type of analysis has been developed rather uniformly over a period of years. The farm analysis service has as its main purposes to: (1) Give assistance to instructors in the mechanics of farm record supervision; (2) assist instructors and cooperating farmers in farm accounting techniques; (3) aid the farmer in the study of his farm business through analysis reports, and (4) provide case study material that can be used by farmers and farm groups to study management problems.

The measures of farm organization and management efficiency being analyzed for the farmers in Minnesota are:

Labor earnings -

1. Crop yields;
2. Percent tillable land in high return crops;
3. Return for \$100 feed to produce livestock;
4. Productive livestock units per 100 acres;
5. Size of business - work units;
6. Work units per worker;
7. Power, machinery, equipment and building expenditures per work unit.

The amount of detail in record analysis is unlimited and should be developed in other States in cooperation with the agricultural economics personnel.

HOW TO IMPLEMENT FARM MANAGEMENT PROGRAMS

State staffs and teachers are seeking assistance and leadership in developing farm management programs. A number of procedures for implementing such programs were outlined.

Leadership Responsibilities at the Regional and National Level - U. S. Office of Education

In carrying out their leadership function, it was recommended that the Agricultural Education Branch, U. S. Office of Education:

1. Agressively promote a program in farm management -
 - a. Call together State directors of vocational education in meetings similar to this one;
 - b. Hold subregional meetings for supervisors, teacher trainers and agricultural economics people. Develop steps to initiate State programs.
 - c. Follow through with State staffs in developing programs - takes continual effort.
2. Distribute information, publicize what is being done.
3. Encourage more training of teachers in farm management including both preservice and inservice.
4. Discuss program with State staff and agricultural economics personnel when visiting in States.
5. Prepare a document for distribution concerning the teaching of farm management.
6. Prepare for distribution a guide to units of instruction in farm management.
7. Develop a job description for a farm management specialist.

Leadership Responsibilities at the State Level

At the State level the State supervisor must take the initiative to bring together supervisors, teacher trainers, and agricultural economics personnel. In organizing a farm management program for the State the following steps are essential:

1. Survey and study the needs within the State.
2. Develop a philosophy and tentative program by calling together supervisors, teacher trainers and agricultural economics personnel.

3. Review program with the State advisory committee.
4. Review program with a select group of teachers.
5. Work out the procedure and program.
6. Develop a guide for use by teachers. This should include information for determining what farming means economically to the community.
7. Develop program through workshops.
8. Make available a record book.
9. Provide for a system of record analysis.
10. Publish record analysis which will motivate and promote program.
11. Employ specialized personnel or secure services through working with the agricultural economics department.

Leadership Required at the Local Level

The local teacher of vocational agriculture must assume responsibility for the program at the local level. These steps appear necessary in developing a program:

1. Survey the importance of farming in the community.
2. Develop information such as "Facts on Farming".
3. Discuss program with school administrator.
4. Review program with advisory committee.
5. Present information to board of education and secure approval. Discuss topics such as:
 - a. Possibilities of increasing farm income with a farm management program;
 - b. The need for employing an additional teacher;
 - c. Possibilities of relieving teacher of some duties for this responsibility.
6. Start on a conservative sound basis. Limit enrollment through selection.

Use of Electronic Data Processing Equipment

The use of electronic data processing equipment is in a stage of development in many States. The experimental work being done now will no doubt be of great value in the future. The data to be fed into the machines must be accurate. The fact that a large number of items need to be analyzed makes it more difficult. With an increase in volume the cost can be reduced.

Problems in Launching a Farm Management Program

Problems that may be encountered in launching a farm management program include:

1. How to prevent the program from being academic.
2. How to get the teachers adequately trained.
3. How to secure sufficient time for follow-up of teachers and farmers.
4. How to provide necessary materials and supplies.
5. How to provide the farm record analysis service.
6. How to get teachers already teaching adults to take on the farm management records project.
7. How to keep from providing too much service for farmers. How to keep programs educational.
8. How to change attitude of teachers in order for them to understand that they do not need to know all the answers to teach farm management but rather they should provide essential facts and let the farmer make the decision.
9. How to limit responsibility of area coordinators and farm management specialists to problems at the teacher level.

Implications for Teacher Training Programs

The teacher must be well grounded in farm management and in "how to teach". All other technical training must fit around these basic principles. The philosophy must be developed that farm management is not an additional course or teaching load but rather a different approach to teaching. In the preparation of teachers for farm management teaching they need:

1. An understanding of the principles of economics;
2. Procedures by which to apply these principles in farming;

3. To be led through the development of a farm management program;
4. Follow-up in implementing a program and evaluation;
5. Adequate teaching aids;
6. To possess the "know how" and not just "know about" farm management.

This will require about four courses at the undergraduate level and additional inservice training. In implementing this type of program the following procedure is suggested:

1. Identify the job of the vocational agriculture teacher;
2. Train teachers to do this job;
3. Emphasize both the "How" and the "Why";
4. Place a priority on certain program areas -
 - a. Let teachers suggest areas for emphasis,
 - b. Secure recommendations of the college;
5. Avoid theory only without practical application;
6. Develop a strong inservice program;
7. Arrange for off-campus courses where farm management is especially appropriate.

Resources Which Are Available

The number one resource available for assistance in a farm management program is people. Every community has access to personnel who are willing and interested in the welfare of farmers. These include agricultural educators, college of agriculture personnel, governmental agency representatives, bankers, representatives of agricultural industries, cooperatives and farm management service workers.

Visual aids, such as charts, overhead projectors, and film strips, can be used effectively in teaching farm management.

Many States have developed teaching aids in this area which are excellent and could be made available to other States. Others are available for review and adaptation. Included in the proceedings of this conference is a partial list of available materials reviewed by participants.

Research in Teaching Farm Management

A few studies which have been completed and others which are needed are listed:

1. Completed:

- "Efficiency of teaching methods" - Minnesota
- "General Survey Report - PL 550" - Minnesota
- "What Do Farmers Need to Know" - Ohio
- "Degree of acceptance by Farmers" - Ohio

2. Needed:

- "To what extent are farmers keeping adequate records"
- "What teachers are now teaching" - Southern Region
- "Study of effectiveness of teaching methods - Individual vs. Group"
- "What constitutes a farm management program"
- "How to make record analysis" - (techniques)
- "Role of the teacher in farm management"

Implications of Farm Management Instructional Program for Teaching of Day School Students

Once a teacher is sold on the farm management program it will influence the day school program in many ways. Listed here are some implications which become apparent:

1. The pattern should be the same as that followed for adults, but at a lower level and at a lesser degree of application.
2. Farm Management is decision-making and this can be applied to any teaching as long as it is related to the farming program.
3. Principles of economics are taught in a simplified form.
4. Principles are taught that can be incorporated into what you are teaching to reach goals.
5. Instruction in farm management in the day school programs can begin by making enterprise analysis rather than the whole farm.
6. As soon as possible the student should share in the farm business either for an entire enterprise or the whole farm.
7. Keeping records on the home farm is an excellent improvement project.
8. An actual farm situation can be used as a problem and used by all students in the class or in an area.

INSTRUCTION IN AGRICULTURE UNDER THE MANPOWER ACT

Dr. Walter M. Arnold, Assistant Commissioner for Vocational and Technical Education, presented to the group some of the implications of the Manpower Act on vocational education. He stressed the need for training of farmers and challenged the group to develop a proposal for agricultural training under the new legislation.

It was agreed by the group that agricultural training has a definite possibility and is needed under the Manpower Act. There are a large number of farmers in the States who would qualify under the provisions of the Act. Training under the Manpower Act might be of most value to young men on farms (ages 18-22). This would be especially true for those persons entering non-farm agricultural occupations. Those farmers not interested in agriculture should be encouraged to take other types of training.

The development of a "Guidance Unit" in helping farmers to determine goals or objectives would be valuable. It would be of much value to an advisory committee and would help in determining the type of training needed.

Training in farm management would be particularly adapted to low income farmers. Training should be beamed for "Operatorship". In the selection of trainees it was stressed that an advisory committee be used. All seemed to agree that there is need for a half-time training program for farmers with training extended over a two-year period. This proposal is to be forwarded to appropriate administrators of the Manpower Act.

Two kinds of assistance appeared to be needed for training in farm management under the Manpower Act and should be prepared by the U. S. Office of Education:

1. An outline for the preparation of teachers for teaching in the area of farm management;
2. An outline or guide for teachers to use when they are employed.

It was suggested that a committee be selected to develop the general basic outline. Adaptations could be made by the State to meet local needs. This procedure would save much time and effort for the State staff. It was pointed out that probably capable farmers would be selected as teachers. They would be supervised by local teachers of vocational agriculture. The special teachers would need an outline giving basic farm management information with the State providing specific teaching materials. The outline should be somewhat as developed at this meeting.

It was agreed that a basic course outline should be developed on farm organization, farm management and operation, including some basic teaching materials. The course should be built around the needs of trainees and include farm management, farm mechanics, and production patterns. Quick action is necessary in developing such an outline. Because of this fact it seems desirable to contract with an agency other than a University. Course outlines from Land-Grant Colleges on farm management and operations could be reviewed. McGraw-Hill Publishing Company and Doane Agriculture Service were suggested as possible contractors.

It was agreed that it was of utmost importance to have a select committee review such material before it is printed. The committee should be composed of teachers, supervisors, teacher trainers, and subject matter specialists.

States must provide intensive preservice and continuous inservice training for teachers under the Manpower Act.

CONCLUDING COMMENTS

All participants expressed gratitude to the U. S. Office of Education for calling the conference and for focusing attention on the teaching of farm management. Many worthwhile ideas from the meeting will be used in the States. The report of the conference should have great value in assisting other States in initiating or in further improving farm management programs. There is evident much enthusiasm for further development of this area of instruction in the vocational agriculture programs. Two statements are repeated here as an indication of the philosophy in the minds of the participants.

"The farm management program will work; we just have to make up our mind."

"This is one area in which a farmer can pull himself up by his own bootstraps, if there is any way."

B I B L I O G R A P H Y

The following is a partial list of farm management materials submitted by the States for review by the conference participants. These materials are on file in the Agricultural Education Branch of the U. S. Office of Education.

Course Outlines

A Brief Explanation of a Suggested Procedure for Farm Management Instruction in Agricultural Education. Fuller, G. R., Cornell University, Ithaca. August 1962. 11 p.

A Course of Study For Adult Farmer Instruction in Farm Management and Farm Business Analysis. University of Minnesota, University Agricultural Bookstore, St. Paul. 1960.

Adult Education in Agriculture: A Prospectus. Minnesota Department of Education, Instruction Division, Vocational Education Section, Agricultural Education Unit, St. Paul. 9 p.

A Resource Unit for Teachers of Agriculture on Measures to Use in Determining Farm Business Efficiency. New York State College of Agriculture at Cornell University, A Unit of the State University of New York, Ithaca. April 1962. 14 p.

A Shortcourse in Farm and Ranch Management. A. & M. College of Texas, Texas Agricultural Extension Service, Extension Service District 3 Agricultural Bankers Conference, March 7, 1962. 34 p.

Farm and Home Planning is the Way to Business Efficiency: Facts, Figures, Goals, Teaching Ideas. Canada, Ralph W. and Woodhull, James E., Colorado State University, Department of Vocational Education, Agricultural Education Section, Fort Collins. 69 p.

Farm and Home Planning Workshop (VE 138). Colorado State University, Department of Vocational Education, Agricultural Education Section Fort Collins. 1959. 6 p.

Farm Management: Source Units. Hamilton, A. B., University of Maryland Extension Service, College Park. July 15, 1960. 64 p.

Farm Management Teaching Plan. Prepared by teachers of vocational agriculture at Jackson, Tennessee, Summer 1957, with the help of D. W. Brown, Agricultural Economics and A. J. Paulus, Agricultural Education, University of Tennessee. Knoxville. 8 p.

The Farmer and Credit: Lesson Plans. The Pennsylvania State University Department of Agricultural Education, in cooperation with The Farm Credit Banks of Baltimore by Otto Legg, Graduate Assistant, University Park. 25 p.

Outline - Basic Principles for Use in Vo-Ag Courses of Study in Secondary Schools. Mississippi State University, Agricultural Education Department, State College. August 1962. 101 p.

Study Guides For Farm Planning and Organization. Colorado State University, Department of Vocational Education, Agricultural Education Section, Fort Collins. June 1961. 45 p.

Suggested Course of Study in Farm Management for Adult Classes, Jobs I through XII. Mississippi State University, State College. 17 p.

Teaching Farm Business Analysis in Programs of Vocational Agriculture For Young Farmers in Kansas Communities: A Report of the 1962 Summer Program Planning Course at Kansas State University. Kansas State Board for Vocational Education, Topeka. July 1962. 63 p.

Teaching Farm Management - How. The Ohio State University, Department of Agricultural Education, Columbus. 1 p.

Teaching Units. University of Illinois, College of Agriculture, Vocational Agriculture Services, Urbana.

Farm Management Tools

Annual Report, 1961, Vocational Agriculture Farm Analysis: East Central Minnesota. Area Vocational School, Austin, Minnesota, in cooperation with Minnesota State Department of Education, Vocational Division, and University of Minnesota, Agricultural Education Department St. Paul. April 1962. 21 p.

Balanced Farming, Labor, Capital, Management. Agdex 810/018. The Ohio State University, Department of Agricultural Education, Columbus. 1960. 53 p.

Budget Facts For Teachers of Vocational Agriculture. Agdex. .40/22. The Ohio State University, Department of Agricultural Education, and The Ohio State Department of Education, Vocational Agriculture Service, Columbus. 1961. 32 p.

Calculating the Measures of Efficiency of Operation - Release #1. Revised 1957 for Veterans Agriculture Class, Austin, Minn. Public Schools. Minnesota Vocational Agriculture Instructors' Association. 19 p.

Compilation Of Data For Use In Farm Planning. The Pennsylvania State University, College of Agriculture, Department of Agricultural Economics and Rural Sociology, University Park. February 1961. 57 p.

Farm Budgeting Reference Manual. New York State College of Agriculture at Cornell University, A Unit of the State University of New York, Ithaca, in Cooperation with the Agricultural Research Service, U. S. Department of Agriculture. A.E. Res. 15. April 1959. 65 p.

Farm Business Chart. New York State College of Agriculture at Cornell University, A Unit of the State University of New York, Ithaca. February 1962. 2 p.

Farm Business Training For Vocational Agriculture and Young Farmer Students: Guide For Farm Planning. State Board for Vocational Education, Topeka. August 1962. 15 p.

Farm Planning Work Sheets for Pennsylvania Young Farmers. The Pennsylvania State University, Department of Agricultural Education University Park. 1958. 16 p.

Guide for Estimating Annual Return to Labor, Management and Capital: Cow-Calf Operation - Central and East Texas. MP-398. A. & M. College of Texas, Texas Agricultural Extension Service, College Station. 7 p.

Guides for Estimating Return to Labor and Management: Resources Needed for \$2,500 Labor-Management Income - Central and East Texas. MP-380. A. & M. College of Texas, Agricultural Extension Service, College Station. 27 p.

My Farm and Home Inventory. Department of Agricultural Education, The Ohio State University and Vocational Agriculture Service, State Department of Education, Columbus. 9 p.

My Farm and Home Plan: With Estimated Net Income. The Ohio State University, Department of Agricultural Education, and Ohio State Department of Education, Vocational Agriculture Service, Columbus. 12 p.

Nebraska Electronic Farm and Home Record Project. (Including Forms) University of Nebraska, Extension Service, College of Agriculture, and U. S. Department of Agriculture cooperating, Lincoln.

Next Year's Farm and Home Operation. The Ohio State University, Department of Agricultural Education, and Ohio State Department of Education, Vocational Agriculture Service, Columbus. 9 p.

Planning Your Farm Business. University of Illinois, Cooperative Extension Work in Agriculture and Home Economics, College of Agriculture, and the U. S. Department of Agriculture cooperating, Urbana. 28 p.

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The Use of Goals (In Teaching - In Learning). The Ohio State University, Department of Agricultural Education, Columbus. 1 p.

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A Look At Vocational Agriculture in Tennessee: With Special Emphasis on Distribution of Teaching Time and Use of Teaching Materials. Paulus, Albert J., University of Tennessee, Department of Agricultural Education, Knoxville. October 1959. 158 p.

Efficient Field Machinery Selection. Hunt, Donnell; (Prepared for Presentation at the 1961 Winter Meeting of American Society of Agricultural Engineers, Chicago, Illinois. December 12-15, 1961). Paper No. 61-628. University of Illinois, Agricultural Engineering Department, Urbana. 1961. 15 p.

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of Agricultural Economics, Institute of Agriculture, and U. S.
Department of Agriculture cooperating, St. Paul. 1961. 28 p.

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