

State of Indiana Department of Public Instruction

Committee Report  
(Tentative)

PRESENT AND POST-WAR PLANS  
FOR  
AGRICULTURAL EDUCATION  
IN THE  
PUBLIC SCHOOLS OF INDIANA

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1944

## EXPLANATION

The state superintendent of public instruction invited a group of both school and lay members to serve on a committee whose purpose it was to prepare a tentative report on present and post-war plans for agricultural education in the public schools of Indiana. The members of this committee accepted the responsibility.

After working for several months individually and collectively, the present tentative course is presented for the consideration of school administrators. The state superintendent wishes to thank every member of the committee for his splendid services.

The personnel of the committee is as follows:

### Active Members

F. Stanton Galey, Chairman	City Superintendent	Fairmount
Thomas Fogarty	County Superintendent	Shelbyville
H. C. Wampler	Principal	Washington
Herbert H. Edwards	Trustee	Indianapolis
C. H. Elliott	Vocational Agriculture Teacher	Angola

### Advisory Members

Anson Thomas	Indiana Farm Bureau	Indianapolis
Herschel Newsom	Indiana State Grange	Columbus New
W. G. Smith	Indiana County Extension Agents Association	Castle
Harry James Reed	Dean of the School of Agriculture, Purdue Univ.	Lafayette

### Ex-officio Members

Harry F. Ainsworth	State Supervisor of Agricultural Education	Indianapolis
Dr. B. C. Lawson Bruce	Head Teacher Trainer	Lafayette
F. Hardy	Past President, Indiana Vocational Agriculture Teachers Association	Scottsburg

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## INTRODUCTION

Agriculture is a basic industry in Indiana. This is true from the standpoint of its contribution to basic needs as well as to the total financial investment in the business.

It is equally true that agriculture is rapidly becoming an industry based on scientific principles not only with reference to production practices but also with reference to the whole field of farm management, including financing, marketing, insurance, leases, farm accounting, conservation in all of its phases, co-operatives maintenance of farm balance and other factors.

The application of scientific principles in the field of crop and livestock production is more obvious, but of no more fundamental importance, than in other phases of farming. But even in this respect instruction in-regard to such matters as soil analysis, identification of fertility needs according to plant symptoms, maintenance of soil fertility, control of disease and insects, and feeding livestock efficiently are only a few of the countless aspects of food production that need to be studied by rural school boys and established farmers. The need is obviously for more, not less, time devoted to the study of agriculture both in and out of school and for agricultural education in more rather than in fewer communities.

A well educated and technically trained farm population will be the best security against exploitations and the best guarantee that agriculture will maintain a position of dignity among other industries. Under such conditions, no longer would rural youth be possessed with a feeling of inferiority, and a feeling that they need look elsewhere for challenging opportunities. The emigration of many of the choice youth of the land to cities has continued too long, and only a dynamic, effective, challenging, educational program will help young men to recognize in agriculture and rural life the kind of opportunity for leadership and service that one could desire.

In the State of Indiana several agencies both publicly and privately supported are interested or commissioned with the responsibility of rendering some phase of agricultural education service to the rural people. The two publicly supported and commissioned agencies most definitely concerned in this program are vocational agricultural education and co-operative extension work. Both of these agencies receive support from federal, state, and local funds. Both work with the same people with the same general objectives mentioned above as a basis for their work.

The typical vocational agriculture program is characterized by being limited to a township or school district. It is predominately in-school instruction with a limited amount of adult education. The instruction is more intensive and individual than is true of extension. Vocational agriculture teachers are supervised by men primarily concerned with educational methods.

The typical extension department operates with the county as a unit. It is primarily on an out-of-school program, having a co-operative relationship with schools particularly concerning youth programs. The extension department depends entirely on the voluntary participation of both farm adults and youth. It uses an extensive method of approach, with demonstrations, meetings, local leaders, et cetera. The local agent is supervised by both those specializing in extension methods and in subject matter.

It is self-evident that the learner, whether adult or youth, will be better served with a maximum of co-ordination and a minimum duplication of effort between these two agencies. This should occur both on a state, county, and local level.

Both agencies should fully co-operate with existing farm organizations in so far as their general community educational program is concerned.

To implement the above stated principles, state leaders of extension and vocational agricultural education, assisted by representatives of farm organizations, should develop a memorandum of understanding which would clearly set forth a state policy for a co-ordinated program.

It is definitely recognized that the vocational agriculture teacher is a part and parcel of the school system and is under its administrative director, yet the nature of his work and the closeness of his contact with the people with whom he works causes him to have more community relationships than any other teacher in the school. Because of this position, it is felt that any community activity supplementary to his regular vocational agricultural program should be developed with the help and approval of the school administrators, the school patrons, the vocational advisory committee, and the county agricultural extension representatives. Any such related program, such as 4-H Club work should take cognizance of the vocational agriculture teacher's responsibilities in developing a comprehensive and balanced program of vocational agriculture, including supervised farm practice, part-time classes, evening school classes, and effective means of promoting supervised farm practice and enrollment in all-day classes.

In considering this situation it should be pointed out that extension is in position to render vocational education a very definite service by helping teachers keep well informed on current agricultural information. It can assist also in motivating agricultural study and popularizing vocational instruction. On both county and state levels it is in position to do many organizational jobs that will help co-ordinate the two programs.

Vocational education in agriculture on the other hand is well adapted to render service in the matter of local leadership in both adult and youth programs, and in giving individual attention to local matters that extension is unable to do for lack of personnel.

These matters should be approached with the interest of the learner uppermost rather than with the idea of public agents in either service obtaining a preferred position. The opportunity for this co-ordinated program is almost unlimited and the general public will not be too slow in recognizing whether the job is well or poorly done.

## PART I

### AGRICULTURE IN THE ELEMENTARY SCHOOLS - GRADES 7 AND 8

#### I. Need for an Enlarged program

- A. The characteristics of adolescents provide the teacher an opportunity to capitalize the naturally expanding interests of youth. Therefore, seventh and eighth grade agriculture should be an integral part of the school program so that it can not only enlarge the horizon of youth in respect to agriculture, but can assist in developing character in creating; a sense of good citizenship.
- B. The present seventh and eighth grade program is too crowded to give agriculture its fair share of emphasis. A correlation of agriculture and science is suggested.
- C. Since it would be futile to attempt in the seventh and eighth grade an exploration of all the many phases of agriculture, this subject should be presented on the basis of community interest and available facilities.
- D. In some schools an agricultural itinerant teacher or consultant would improve the teaching of seventh and eighth grade agriculture.

#### II. Nature and Purpose of Programs of Seventh and Eighth Grade Agriculture

- A. The nature of this work should be exploratory to assist the pupils to understand the occupational opportunities in agriculture, and the opportunities available to study vocational agriculture in the high school.
- B. Most of the boys who take this course have had some experience in agriculture, and they could now be taught to analyze in a very simple manner the problems that confront them.
- C. The course should also help pupils to see the important place agriculture occupies; the need for trained farmers to produce food for their country and the war-torn nations of the world.

#### III. Some Standards

- A. More time devoted to this course.
- B. Well organized materials in addition to textbook.
- C. Shop equipped for teaching elementary skills in farm shop.
- D. A teacher who knows the rural youth, and has a knowledge of, and an interest in farm life.
- E. Some experience in elementary farm accounting.

#### IV. Methods

- A. Use textbook as a guide to agricultural information.
- B. Use visual aids and collections of weeds, seeds and soil samples.

- C. Take field trips.
- D. Correlate work with 4-H Club projects.

#### V. Some Administrative Responsibilities

- A. Have a sympathetic and co-operative attitude toward the whole agricultural program.
- B. Build school and community interests in the program.
- C. Provide adequate facilities and materials.
- D. Know opportunities for doing what the pupils are preparing to do.

#### VI. Evaluation

- A. Does the program give the pupils a wholesome attitude toward rural life?
- B. Can the pupils apply in actual life situations, what is taught?
- C. Have the pupils' interests been stimulated?
- D. Do the pupils have a desire to continue the pursuit of agriculture in high school?

## PART II

### GENERAL AGRICULTURE IN THE HIGH SCHOOL

#### I. Need for an Enlarged Program

It is obviously quite impossible to provide agricultural education on a vocational basis even in all rural communities in the immediate future. This is true because there are not enough adequately trained instructors available. It is recommended, therefore, that administrators in those schools not now offering instruction in agriculture should give serious consideration to a revision of their curricula in order to include instruction in general agriculture beginning with the 1944-1945 school year.

#### II. Nature and Purpose of the Program

The objective of instruction in general agriculture will be largely that of appreciation. Practical aspects of instruction, such as are afforded by competently supervised farm practices selected by boys in vocational agriculture, will necessarily be limited. Instruction on a vocational basis should be incorporated into the program at the earliest opportunity.

#### III. Some Standards

The standards should follow those outlined in the present "State Course of Study for General Agriculture." The greatest emphasis should be placed on studying agriculture as a way of life with the social and economic problems peculiar to this occupation. Those should include (a) an understanding of the kind of financing required, (b) the role that natural elements play in determining success or failure, (c) the long-time aspects of the business, (d) the relative isolation of farmers and its attendant effects on their habits of thinking, (e) the opportunities for cooperative activities, (f) the need for a well informed agricultural leadership, and (g) the technological improvements that necessitate a well trained farm population.

#### IV. Some Methods

The office of the state superintendent of public instruction should use appropriate means to emphasize the importance of, and need for instruction in agriculture on a limited basis until such time as vocationally trained instructors are available.

#### V. Some Administrative Responsibilities and Relationships

Local administrators in schools not offering agricultural instruction should be responsible for a critical evaluation of their curricula with the objective either of adding agriculture or of substituting it for other courses of less practical value. Agricultural instruction should be given only by teachers who, by training and experience, have a point of view compatible with rural interests and needs.

#### VI. Some Means and Methods of Evaluation

The evaluation methods should be the same as those used for other academic subjects.



## PART III

### VOCATIONAL AGRICULTURE IN THE HIGH SCHOOL

#### I. The Program as a Whole

##### A. General Nature of Instruction in Vocational Agriculture

Vocational agriculture, like all forms of agricultural education, is concerned with the development of human abilities that are related to agricultural occupations. However, an adequately developed program of vocational agriculture provides educational services which distinguish it from other forms of agricultural education available in local communities.

As compared with general agriculture, vocational agriculture should provide not only for the study of facts and principles in the school, but also for practical experience in using such facts and principles as guides to action in real farming situations. Provision for such practical experience is usually designated as "farm practice."

As compared with programs of agricultural education, not directed by the high school, vocational agriculture should be a medium of instruction that is in general relatively more systematic, more intensive, and more individualized.

The primary responsibility of the teacher of vocational agriculture is to provide instruction which embodies these distinguishing characteristics. The conditions under which the teacher of vocational agriculture is required to work should be so organized as to enable him to provide such educational service.

##### B. General Objectives of Vocational Agriculture

The general objectives of instruction in vocational agriculture may be described as follows:

#### 1. The primary general objective of vocational agriculture.

The primary general objective of vocational education in agriculture may be stated as vocational efficiency in agricultural occupations. This objective may be divided into four major phases as follows:

a. Exploration:- to help individuals develop the abilities necessary to analyze the possibilities of an agricultural occupation and to make an intelligent decision relative to further activity in respect to the occupation. This phase of the objective "vocational efficiency" may well be emphasized in instruction provided in the 9th grade.

b. Preparation: - to help individuals develop the elemental abilities necessary for initial employment in an agricultural occupation. This phase of the objective "vocational efficiency" may well be emphasized in the instruction provided for senior high school pupils - grades 10 to 12.

c. Placement: - to help individuals develop the abilities necessary to become fully established in an agricultural occupation—for example,

to become an operator of a cash grain farm. This phase of the objective "vocational efficiency" may well be emphasized in part-time instruction provided for out-of-school youth not yet fully established in an agricultural occupation.

d. Adjustment: - to help individuals develop the abilities necessary to meet the changing and unpredictable conditions of an agricultural occupation and to raise the level of their success and satisfaction in an agricultural occupation. This phase of the objective "vocational efficiency" may well be emphasized in evening school instruction provided for adults who are already established on some level in an agricultural occupation.

## 2. The secondary general objectives of vocational agriculture.

The secondary general objectives of vocational education in agriculture include all the commonly accepted objectives of the high school in the various non-vocational areas of learning; for example, in such areas as civic activities, recreational activities, homemaking activities and health activities. It is realized that no absolute cleavage exists between vocational and non-vocational areas of learning. For practical purposes, however, it may be said that types of instruction other than vocational education are provided in the school primarily to make contributions to objectives in the non-vocational areas of learning. Consequently, any effort to make instruction in vocational agriculture contribute to the non-vocational objectives should be secondary to efforts devoted to securing effective contributions to the vocational efficiency objective.

### C. Groups to be Served

The nature of the various phases of vocational efficiency previously described in the discussion of objectives, indicates that the achievement and maintenance of occupational success in agriculture is a long-time task which extends over the major part of an individual's lifetime. Consequently a complete program of vocational agriculture would provide systematic educational services not only for high school students but also for out-of-school youth and for adult farmers. Instruction provided for out-of-school youth is usually designated as part-time classes and instruction provided for adult farmers is usually designated as evening classes or evening schools.

### D. The Advisory Committee

The necessity for any adequate program of instruction in vocational agriculture to be closely related to the practical activities of out-of-school life is the basis for the requirement in the Indiana Vocational Education Law that each vocational school or department shall appoint a local advisory committee to be consulted regarding this program.

## II. All-Day Classes for High School Youth

### A. Need for an Enlarged Program

Organized training in agriculture on a vocational basis should be made available to all Indiana rural high school youth, and to urban school youth where the need justifies the program. Supporting statements include the following:

1. Agriculture is rapidly becoming a vocation based on scientific principles.
2. The best antidote for peasant or marginal farming is a farm population informed and well trained in their occupation.
3. A farm population trained in the business of farming is the best guarantee against need of government subsidies, incentive payment, regimentation, etc.
4. Most farm boys, based on past experience, will not have the opportunity to take advantage of formal education after leaving high school except that provided by local educational agencies. It is imperative that they have vocational training in high school.
5. Statistical studies show that only about one-third of the schools serving rural youth offer the opportunity to gain organized training and experience in the vocation of farming.
6. Mere textbook teaching in agriculture is neither more popular nor more practical than trying to learn typewriting by reading a book about it.
7. Organized training and supervised practice in learning any vocation tends to hasten economic independence. This is a desirable goal for all farm boys.
8. The home, school, and pupil combination furnishes an ideal co-partner relationship in the field of education. There is no better opportunity to enlist the interest of parents in the school.
9. If a relatively short-term 4-H program has made a significant contribution to improved fanning, it is reasonable to assume that a comprehensive and adequately supervised program of vocational agriculture conducted on a twelve months' basis would be proportionately valuable.

### B. Nature and Purpose of Program

1. Farming, generally speaking, is carried on a twelve months' basis, and is seasonal in nature. Any program of agricultural education in high school that is not likewise on a twelve months' basis and seasonal in nature would be incomplete and inadequate.
2. That pupils learn more thoroughly and satisfactorily by "doing" is a generally accepted truth. Farm practices carried on by boys in conjunction with, or related to, formal instruction furnish ideal learning situations. This feature distinguishes vocational from academic instruction.

3. Supervision of boys' farm practices on a continuous and yearly basis by teachers adequately trained in technical agriculture is an essential feature of the program. No phase of education provides a greater challenge to successful teaching than in the field of vocational agriculture under conditions which require the co-operation of the parents, the boy, and the teacher. The greatest tact is required to secure this co-operation involving financial outlays, sharing, and help from the parents.
  4. The primary objective of agricultural education in high schools is to train boys to become proficient farmers and worthy citizens of their communities. Properly trained, they will do better the job most of them will engage in anyway.
  5. The Future Farmers of America, a voluntary organization of vocational agriculture boys, offers opportunities to develop leadership, co-operation, participation in community services, fellowship, business methods and financial responsibilities as well as how to properly conduct meetings. This type of education is needed in every rural community. A Future Farmer Chapter is possible only in schools with departments of vocational agriculture. In Indiana, Future Farmers of America may also be members of 4-H clubs. In our state these two organizations are cooperative and in no sense competitive.
  6. Agricultural education in high schools is intended to train regularly enrolled boys in approved skills and practices which may be the skills and practices common to the farming methods of the community and to encourage and aid them in putting them into practice on their own farms. It is neither desirable nor expedient, therefore, to allow trainees to become exploited by commercial interests (farmers or others beyond the point where such practices contribute to desirable learning experiences. The numerous jobs involved in the common farm enterprises require the use of all available time to teach and practice them. The agricultural department should not be considered a community workshop, if, in being such, it encroaches upon the time or space needed by high school pupils. Illustrations of such undesirable commercial practices are: incubating eggs, culling or caponizing chickens, dairy herd testing, building farm equipment, etc. (Exceptions may be justifiable on a temporary basis during the wartime emergency.)
  7. A reasonably equitable distribution of time should be made between (a) classroom and laboratory study of farm enterprise jobs and (b) farm shop activities, based on the needs of the group for these phases of agricultural instruction. Farm shop, although by its very nature being more immediately objective and tangible in results accomplished (thus making a more popular appeal to the community), should be kept in its proper relationship to the other phases of classroom instruction less spectacular, but quite as important in training boys for proficiency in farming.
- C. Some Standards
1. Vocational agricultural education teachers must be graduates of land grant colleges of agriculture with technical and professional training at least equivalent to that of other high school teachers. With the many scientific and constantly changing and improving phases of farming the trend should be toward increasingly higher standards and more hours of training in technical agriculture than has heretofore prevailed.

2. A total class enrollment of at least 10 boys should be the minimum number for the establishment of an agriculture department on a vocational basis.
3. In order to meet the wartime emergency it is recommended that two neighboring consolidated schools co-operate in the employment of a vocational agriculture teacher on a half-time basis in each school. This is being done at the present time in a few instances. Qualified teachers returning from war service may be employed with no other restrictions than are placed on non-war service teachers unless their absence from the teaching profession has extended longer than three calendar years.
4. Units of school credit commensurate with the 420-minute Federal time requirement should be granted for agricultural instruction on a vocational basis. At the present time the one unit of school credit for 420 minutes per week supplemented by a properly supervised farm practice program on a twelve months' basis is definitely out of line with school credit granted in other subjects.
5. Room and equipment requirements including subject matter and reference library, laboratory and farm shop equipment, filing cabinets, lighting, blackboard space, and other essentials should be a function of the office of the state supervisor of agricultural education with the cooperation and advice of the local school officials, the teacher, and itinerant teacher trainer for the area concerned. Bulletin 138, Section III B should serve as a guide in making these decisions.
6. The school officials and administrators, with the counsel of the advisory committee and the vocational agriculture teacher, shall be free to choose either the Cross-section or Enterprise type of program as outlined in Bulletin 138, Section III C. However, when a selection of either type has been made and approved by the local school administrators, a change to the other type may not be made until two full school years have been completed.
7. It is recommended that in schools where the total enrollment in vocational agriculture is forty or more pupils the vocational agriculture teacher should not be given teaching assignments outside his major field.

#### D. Some Methods

1. A state-wide publicity campaign explaining the program of education in agriculture, its merits and limitations, and justification for its expansion on a vocational basis should be inaugurated and carried out by the state supervisor of agricultural education under the direction of the state superintendent of public instruction. Research investigations of the contribution education in vocational agriculture has made should form the basis of this program.
2. Federal and state reimbursement to school corporations offering agricultural education on a vocational basis should to an amount which bears the same ratio to the total amount of money available for such purpose that the number of vocational agriculture teachers bears to the total number of vocational teachers in the state.

3. A reasonable assumption being that more effective teaching will follow compensation for necessary expenses incurred in teaching as in other professions, it is recommended that school corporations reimburse vocational agriculture teachers for all necessary and legitimate travel expense incurred in performing the functions of their profession on a rate basis established by the state board for vocational education, and that said school corporation shall be reimbursed in full by the State from available funds therefore.

#### E. Some Administrative Responsibilities and Relationships

1. Local school administrators shall have the same supervisory relationship to the program of agricultural education that they have to other departments. They shall acquaint themselves with the objectives, the unique and special methods of instruction including field trips, supervised farm practices, laboratory, job analysis and seasonable characteristics of the program. They should appreciate the fact that a considerable amount of organized learning in agriculture occurs outside the classroom both during and at the close of the school day, and consequently should assist administratively in making necessary adjustments in school and faculty relationships on this account.
2. Agriculture teachers have the same relationship to school administrators as other high school teachers. Local administrators should be advised by teachers that necessary and justifiable supervision of farm practices outside of regular school hours, as well as part-time and evening school preparations and activities, may make limited extra curricular assignments advisable as compared to academic teachers.
3. The state supervisor of agricultural education should require only those reports which have a definite and proven utility value.
4. The inauguration of a program to create and improve subject matter material in vocational agriculture is an immediate and important responsibility of state administrators and supervisors. Provision should be made for the appointment and employment of a qualified personnel to give effect to this need without delay.

#### F. Some Means and Methods of Evaluating

1. Every phase of organized education should be subjected to reliable objective evaluation. Vocational education is no exception. Improvements in methods, techniques, and results will follow honest and impartial evaluation IF the motive of evaluation has its genesis in a desire for improvement. Some reasons for evaluation are:
  - a. The data will serve as an objective point of departure for further improvements in methods.
  - b. It will aid in improving the teaching methods of new teachers.
  - c. It will serve as a means of providing a community audit of the program.

2. Evaluations should be made by uninterested, unprejudiced, and competent personnel. The agriculture teacher, more than anyone else, should welcome, initiate, and participate in the evaluation program. Self evaluation is probably more effective than imposed evaluation. Selected school patrons, advisory board members, the county agricultural agent, local administrators, and state supervisors should participate. The school patron group should include former agriculture, students in the older departments.
3. Methods rated somewhat on the basis of increasing validity--
  - a. The teacher's own opinion based on feeling, mostly.
  - b. Unsystematized opinion of other people—interested, perhaps, but includes both competent and incompetent, prejudiced and unprejudiced.
  - c. Observations of trained supervisors, local and state. Limitations lie in (1) the tendency to formulate conclusions on too little observation. Recognized competent authority has suggested a mini-mun of 20 to 30 hours of observation of a teacher is necessary; (2) lack of agreement on the qualities of good teaching. Personality differences of teachers enter into this picture; (3) self-consciousness of teachers under observation. Probably the supervisor's attention should be focused on the reactions of the pupils rather than on the teacher.
  - d. Observation of the end product: desirable changes in boys. Establish objectives for, and with, each boy at the beginning of instruction, set up a program to achieve objectives, then later check the boy's achievements against the objectives. (1) Observation of the boy on the farm, (2) Farm practices of the boy and his records, (3) Changes on the home farm program over a period of years. An objective checking form should be constructed under the supervision of the state supervisor of agricultural education, and its use required periodically at intervals of three years in all vocational agriculture departments.

### III. Part-Time Classes for Out-of-School Youth (16-25 years of age, usually unmarried and perhaps not established in the farming business.)

#### A. Need for an Enlarged Program

1. To provide advanced training for farm boys beyond that received in either vocational or general type of agricultural classes.
2. To provide a refresher course for those going to the service before graduation.
3. To provide training for those with agricultural service deferments.
4. To provide training for those farm boys with physical disabilities.
5. To provide training for those farm-reared young men, who left school to accept the high wages of industry and who will be returning to the farm, as victory approaches and factory work is curtailed.

6. To provide for reorientation of those returning from the armed forces.
7. To provide for real assistance in the problems confronting boys of this group in becoming established in the farming business, or in related occupations.

#### B. Nature and Purpose of the Program

1. To provide the abilities needed to become established in farming or a related occupation.
2. To offer detailed and practical information on the most important farm practices of the community—soil conservation and better methods in production and marketing of produce being common to all areas of the state.
3. To develop in these young men a correct sense of social and civic responsibility.

#### C. Some Standards

##### 1. Teacher

- a. Classes to be organized and taught by competent, regularly licensed vocational agriculture teachers.
- b. To the extent that current regulations and funds permit, specially trained and successful men of the community may be used to assist the local teacher in providing instruction for these classes, Former county agents, farm managers, hybrid and certified seed producers may be used.

##### 2. Physical equipment

Rooms properly equipped for the teaching of vocational agriculture are the most suitable for the meeting place because reference library, laboratory and shop equipment, blackboard space, filing cabinets, suitable lighting equipment, are available. Department of public instruction Bulletin 138, entitled Vocational Education in Agriculture, Section III, lists the desired equipment for such instruction. Vocational education bulletin No. 4, May 1939, entitled Rooms and Equipment for Vocational Agriculture, published by Purdue University Division of Education and Applied Psychology, is a good supplemental reference to Bulletin 138.

##### 3. Time allotment

Not less than 15 instruction periods of not less than 90 minutes each.

Desired that group function as an organization throughout the year— thus giving opportunity for the social and civic development of its members.

##### 4. Class size

For profitable exchange of experience, ideas and information, and for justifiable reimbursement, not less than 10 should be enrolled. Maximum enrollment of 25-30 would seem to be a desirable limitation.



#### D. Some Methods of Extending the Program

1. Publicity from the office of the state supervisor of agricultural education and the state superintendent of public instruction emphasizing the importance of the part-time program on a state-wide basis.
2. Continued and increased reimbursement to school corporations engaged in the program.

#### E. Some Administrative Responsibilities and Relationships

1. School administrators necessarily must have the same supervision of the part-time program that they exercise over other subjects and departments of the day school.
2. They should have an understanding of, and belief in, the merits of the vocational program, Administrative officers should have training preparing them for proper administration of vocational programs.
3. Suitable quarters, equipment and supplies must be furnished by the employing officials.
4. Part-time classes should be under the general supervision of the State Board for Vocational Education--the same as In-School-Youth classes.

#### F. Some Means and Methods of Evaluating the Program

1. An evaluation of the effectiveness of the part-time class is as essential as that of any other part of the agricultural program.
2. This evaluation should be made by those competent of judging improved practices and increased proficiency in farming operations. The teacher, the county agent, the advisory committee, the local administrators and state supervisors are best qualified to make this evaluation.
3. A well organized survey carried on over a period of years is perhaps the most effective method of measuring the effectiveness of the program. This evaluation should be based on the degree to which boys of the community become established in a satisfying occupation, as well as the degree to which improved farm practices are learned.

### IV. Evening Classes for Established Adult Farmers (usually over 25 years of age.)

#### A. Need for an Enlarged Program of Adult Education in Agriculture

1. Total adult enrollment in all states in 1941-42: 72% greater than enrollment in high school vocational agriculture classes.
2. In Indiana probably only 25% as many regular evening classes in 1943-44 as there are departments of vocational agriculture.
3. In Indiana probably only 40-50% as many Food Production War Training classes in 1943-44 as departments of vocational agriculture.
4. Adult farmers are in a better position than youth to change farm practices as the need arises.
5. Agricultural practices following the present war emergency will need intelligent adjustment comparable to adjustments needed during the war emergency.

6. It is a function of a program in vocational agriculture in public high schools to serve the adult group as well as the usual school age group.
7. If all farmers are to be in position to benefit from a program in vocational agriculture, a department of vocational agriculture should organize a comprehensive program of adult education designed to meet the needs of farmers.

#### B. Nature and Purpose of the Program

1. An adult education program should:
  - a. Be carefully organized.
  - b. Provide an integrated course of study in one or more farming enterprises of community interest.
  - c. Provide systematic instruction by a qualified teacher which incorporates discussion, reports by members of the group, field trips, movies, and the like.
  - d. Fulfill the following major objectives:
    - (1) Improve the ability of members of the group to make wise managerial decisions in the light of current conditions.
    - (2) Improve the ability of members of the group to perform operational jobs.
    - (3) Improve the ability of members of the group to participate in rural, civic, and social activities.
  - e. Be built around a coherent farm enterprise, such as corn production, farm management, farm machinery repair, or other pertinent and interesting subject.
  - f. Be taught by the regular teacher of vocational agriculture or other qualified authority.

#### C. Some Standards

1. It should be recognized by both instructor and adult class members that each has an obligation to contribute to the success of the courses
  - a. The instructor to carefully prepare instructional material and systematically plan procedures for each meeting.
  - b. The adult class member to be at the class meeting on time and to be prepared to participate with a receptive attitude.
2. Instruction should continue over a relatively long period, for example;
  - a. Ten meetings of two hours minimum each.
3. The course of study should be an integrated unit rather than a series of unrelated lessons.
4. Regularity of attendance should be expected of the group.
5. The instructor should engage in follow-up activities.
  - a. Call at the homes of the class members in order to help with the application of ideas proposed during the course, and to propose new ideas and practices.

#### D. Some Methods

1. Organizing the course.
  - a. Consult the vocational agriculture advisory committee.
    - (1) A special evening school group may be set up in addition to the regular vocational agriculture advisory committee. This advisory group may be made up of members of the evening class or people interested in the evening school.
  - b. Contact individual farmers and farm organizations.
  - c. Secure publicity.
    - (1) By using the mail, press, and radio.
    - (2) By using the Future Farmers of America as assistants.
2. Conducting the course:
  - a. Methods of teaching to be employed:
    - (1) Conference--All class members contribute to the discussion with the instructor guiding, contributing factual data, and summing up.
    - (2) Lecture--to be used sparingly when other sources of information are not available.
    - (3) Illustrative material such as pictures, charts, movies, maps, etc.
    - (4) Field trips to outstanding farms, implement dealers, stock yards, in order to observe successful practices and to practice operative skills.
    - (5) Reading—material should be available and members should be encouraged to use it.
    - (6) Demonstration--of procedures useful in operative jobs.
    - (7) Practice of manipulative jobs by members of the group.
    - (8) Supervision or follow up--visits to the individual members' farms to help the members to apply principles and to adopt improved practices suggested in the course, and to suggest new improved practices.

#### E. Some Administrative Responsibilities and Relationships

1. Administrative officers should regard adult classes as part of the regular school program in agricultural education.
2. The teacher of agriculture should consult his administrative officers about planning and conducting such classes in agricultural education.
3. Administrative officers should schedule adequate time for the teacher of agriculture to plan, promote and conduct classes for adult farmers.
4. Teachers of agriculture should take advantage of additional time scheduled in which to plan, promote and teach adult classes.
5. Administrators should expect, and if necessary insist that adult classes and related out-of-school activities be carried out by the teacher.

6. Administrators should provide adequate funds to carry on an adequate adult school program.
  - a. State and federal funds are now available for part-time and evening classes as well as for all-day high school students.
  - b. Federal funds are now available for Food Production War Training activities in addition to the regular salary of the teacher. (March, 1944)

F. Evaluation

1. Evaluation should be based on individual adoption of improved practices recommended in the course of study, rather than in the number of people enrolled.
2. Numbers enrolled in adult classes should be small enough for participation by individual farmers and for attention to be given to individual farmer's problems.
3. Percentage of persistence in attendance should also be considered in evaluating the program. In general if the original enrollment drops to below about 75% during the course, some adjustments need to be made in the course or methods.

## PART IV

## TEACHER EDUCATION AND CERTIFICATION

## I. The Need for an Enlarged Program

- A. During the immediate post-war period there will probably be a somewhat heavy demand for teachers of vocational agriculture. This demand will result from a desire of many communities to re-establish the departments they were forced to close during the war period because of a teacher shortage and from a desire of additional communities to establish new departments.
- B. In some ways the educational services demanded of vocational agriculture teachers in the post-war period will be more numerous and difficult than they were in the pre-war and war periods. This will be true because:
  - 1. Many rural young men will be returned from the armed services with the difficult problem of becoming psychologically, socially and vocationally adjusted.
  - 2. Some rural youth and adults who have been away from the farm in industrial or other employment will return to the farm and will need vocational and social training to help them become adjusted.
  - 3. The social and economic problems of rural living may become more difficult in the period of post-war adjustment than they were in the pre-war and war periods.
  - 4. Prosperity may continue for only a short time following the war period.

## II. Nature and Purpose of the Program

- A. The purpose of teacher education in vocational agriculture is to prepare and improve teachers of all-day, part-time and adult evening classes in vocational agriculture.
- B. Teacher education as it relates to vocational agriculture should be assigned the following responsibilities:
  - 1. Some degree of selection of qualified trainees.
  - 2. Pre-service preparation of prospective teachers.
  - 3. Co-operation in the placement of trainees.
  - 4. In-service improvement of teachers.
  - 5. Research that is related to the field of agriculture education.
  - 6. Preparation and assembling of teaching aids for teachers in service.
- C. The preparation of the teacher should include training to perform the manipulative skills of farming.

## III. Some Standards of the Program

- A. Because of the increased number and complexity of the educational services that will be demanded of the teacher of agriculture in the post-war period it is reasonable to conclude he will need a greater total amount of training than he had during the pre-war and war periods. There will be a need for increased training in respect to professional content, technical agriculture and certain aspects of sociology and economics.

- B. "In order to train teachers of vocational agriculture, a teacher training institution must:
- "1. Be in touch with the latest developments in the field of scientific agriculture which relates directly to the agriculture of the state. This means that the institution should have the facilities for, and be engaged in the teaching of agriculture for farming occupations.
  - "2. Give practical instruction in technical agriculture. In order to be able to do this an institution must have farms, farm animals, farm buildings and farm equipment, as well as practical school laboratories
  - "3. Be in touch with the farmers of the state in order that it may keep abreast of current conditions and recent developments in agriculture in the state. The institution should be the center of agricultural activities in the state insofar as they relate to the best principles and practices of agriculture.
  - "4. Be the best equipped in the state so far as instruction, laboratories, farm machinery, farm animals, and other equipment, material, and supplies needed for instruction in the subject matter of agriculture, are concerned.
  - "5. Give instruction in rural-life subjects, such as rural sociology and rural economics. In order to offer adequate instruction in such fields, the institution should be in close contact with the rural life of the state, including rural organizations and societies.
  - "6. Provide professional courses in education, including supervised observation and teaching. The institution should make provision for close and intimate contact with the problems of organizing and conducting programs of systematic instruction in vocational agriculture in order that the professional courses may reflect and more adequately provide for the needs of teachers of vocational agriculture.
  - "7. Be alert to bring about improvement in courses taught and in methods used by its staff members. Since example is stronger than precept, well-taught college courses are the best supplement to professional training."

C. The standards for the training of teachers of vocational agriculture as outlined in State of Indiana, Department of public Instruction Bulletin No. 138, should be retained. Quotations from this recent publication read:

"E. Requirements for certification of teachers of vocational agriculture as set up by the state board for vocational education of Indiana.

"1. Education:

B.S. Degree from any accredited Land Grant College of Agriculture, including the credits in professional subjects required of all high school teachers, or these credits secured in addition to the B.S. degree.

"2. Experience:

Two years' farm experience after attaining the age of fourteen.

"5. Provisional Certificate:

(a) Renewal of this first license or certificate dependent upon extended professional growth beyond acquisition of B.S. degree i.e. 12 hours of graduate credit in a Land Grant College

within four years from the date of issue of the provisional certificate and so distributed as to include 4 hours of agricultural education and 6 hours of technical agriculture. Professional growth while teaching is made possible by the following provisions:

- (1) Permission to engage in full-time professional study as a college resident for a period of three weeks without loss of pay.
- (2) Permission to engage in full-time professional study as a college resident for a period of more than three weeks, provided arrangements are made which are satisfactory both to the local school corporation and to the state supervisor of agricultural education for carrying on the regular work of the department of vocational agriculture."

#### IV. Some Methods in the Program

##### A. Selection of Qualified Trainees

The quality of instruction in vocational agriculture is greatly influenced by the personality, attitudes, interests, occupational experience and mental ability of the teacher. An effort should be made to guide persons who are well-qualified in these traits into teacher education for vocational agriculture. A committee at the teacher-training institution for vocational agriculture should be appointed to plan for doing this.

##### B. Professional Advancement of Teachers

A plan for the recognition of teacher success should be developed to be used in helping superior teachers attain professional advancement.

##### C. Research Related to the Field of Agricultural Education

It is highly important that research in problems that relate to secondary agricultural education be continued and expanded.

Worth-while findings in research should be made available to workers in vocational agriculture.

##### D. Preparation and Assembling of Teaching Aids

The provision of teaching aids is a significant phase of teacher education and should be more fully developed than it is at present. A committee of teacher trainers and teachers should be appointed to determine needed materials. Worth-while materials should be made available to workers in vocational agriculture.

##### E. Pre-Service Preparation of Trainees

1. The pre-service training for teachers of vocational agriculture should include four broad, basic areas, namely, (1) technical education in agriculture, (2) science education, basic to agriculture and to the teaching of science, (3) professional education, and (4) general education.
2. The professional, preparation of the trainees should be extended to prepare them more fully for:
  - a. Teaching adult evening classes.
  - b. Teaching part-time classes of out-of-school youth.
  - c. Organizing instructional content for all all-day, part-time and adult classes in vocational agriculture.

- d. Serving as local supervisors of special teachers of part-time and adult evening classes to the extent that current regulations and funds permit the use of such teachers.
3. It may be desirable to adjust the technical education in agriculture so that more training may be given than at present in:
  - a. Agricultural economics.
  - b. Farm mechanics.
 

Sufficient training might be given in shop and farm mechanics so that the teacher would be sufficiently prepared to train individuals in farm shop skills for which the need is constantly increasing and so that the teacher might be certified to teach general shop in small high schools where both vocational agriculture and a general shop class are needed. This need might be found in small high schools that have a fairly high percentage of non-farm enrollment.
4. Practice teaching centers should be continued near the teacher training institution. The critic teachers in these centers should be charged with developing a pattern of a comprehensive program in vocational agriculture so that trainees may observe and partially participate in such a program before assuming full responsibility as teachers. This comprehensive program should include: (1) all-day classes in vocational agriculture, (2) part-time classes, (3) adult classes, (4) An F.F.A. Chapter, and (5) an advisory committee.
5. Apprentice centers should be selected in the state so that trainees may have the opportunity to teach for a continuous period of from two to four weeks in addition to their participation at the practice teaching centers. These apprentice centers should have in operation a successful and comprehensive program of vocational agriculture.
- F. In-Service Improvement of Teachers
  1. Refresher courses should be planned in professional and technical content for former teachers of vocational agriculture who served in the armed forces, or who took other employment during the war, to help them orient themselves to post-war teaching in vocational agriculture.
  2. Courses should be planned to train men who have been on the job as teachers for a period of years and/or men who require additional training to qualify for the renewal of teaching certificates.
  3. A plan should be developed for the administration of some field instruction to supplement advanced resident instruction for teachers of vocational agriculture or local administrators of courses in vocational agriculture for which graduate credit would be given.
- V. The Preparation and Status of Teachers of General Agriculture in the High School
  - A. The establishment of a teacher of general agriculture in the high school should usually be considered as a temporary arrangement until such time as a vocational agriculture department can be established. In a few schools, e.g. those with a very small enrollment of farm boys, a more permanent course in general agriculture may be desirable.
  - B. It is recommended that the training of teachers of general agriculture as now outlined on page 43 of State of Indiana, Department of Public Instruction Bulletin No. 148 be continued.



## VI. Some Administrative Responsibilities and Relationships

- A. Under the provisions of the State and Federal Vocational Education Acts, the training of teachers of vocational agriculture is conducted under the supervision of the state supervisor of agricultural education as agent for the state board for vocational education.
- B. The direct administration of teacher education in vocational agriculture should be the responsibility of the administrative officer of the teacher training division of the institution that has been delegated the responsibility for training teachers of vocational agriculture.

## VII. Evaluating the Program

- A. A representative sampling of departments of vocational agriculture should be selected in the state and evaluated in order to estimate the proficiency achieved by teachers through training and experience.
  - 1. The program and instruction in these departments should be evaluated. It is recommended that "the material published under the title, "Evaluative Criteria for Vocational Education in Agriculture" by The National Standards Committee for Vocational Education in Agriculture in co-operation with the U. S. Office of Education be used as a guide in formulating a plan for the evaluation.
- B. The organization and activities of teacher education should be compared with the organization's activities of teacher education in a number of states where training needs seem to be similar to the training needs in Indiana as a means of evaluating the program in Indiana.

# **TEACHER IMPROVEMENT**



## **VOCATIONAL AGRICULTURE**

**INDIANA STATE BOARD FOR VOCATIONAL  
EDUCATION  
AND  
PURDUE UNIVERSITY, CO-OPERATING**