

USING AN ADVISORY COUNCIL TO DEVELOP A

COURSE OF STUDY

by

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TABLE OF CONTENTS

CHAPTER		PAGE
I.	INTRODUCTION	1
	Statement of the Problem	7
	Need for the Study	10
	Limitations of the Study	11
	Definition of Terms	12
II.	ORGANIZATION OF THE STUDY	17
	The Supervised Farming Program	17
	The Future Farmers of America	23
	The Farm Mechanics Program	29
	History and Background	38
III.	RESULTS OF THE STUDY	52
	Agriculture I Course of Study	52
	Agriculture II Course of Study	64
	Agriculture III Course of Study	76
	Agriculture IV Course of Study	86
IV.	SUMMARY AND RECOMMENDATIONS	97
	Summary	97
	Recommendations	99
	Conclusions	101
	BIBLIOGRAPHY	103
	APPENDICES	105

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CHAPTER I

INTRODUCTION

A four year course of study based upon community needs has been the primary objective of the author for several years. Every agriculture instructor yearns for success in his chosen occupation. This may be achieved in part, I believe, by basing a course of instruction upon the resources and needs of the community, which meets the objectives of the students, the school, and the community. The profession recommends an advisory council as one of the better ways to accomplish this.

The task of developing a four year course of study for a vocational agriculture department has a least four significant aspects: first, the determination of educational objectives; second, the choice or selection of experiences which comprise the instructional program; third, the organization of these experiences into a four year high school program; and fourth, determining methods by which changes in the program can be made, evaluated, and sustained (17, preface).

The responsibility of keeping abreast of social and technological advances as the result of research in agricultural education poses a constant challenge to the

vocational agriculture teacher. It is becoming increasingly difficult for the lone teacher to understand and to interpret for students the complex forces affecting farming and rural living. This study was undertaken, with the assistance of an advisory council, to develop a four year course of study for vocational agriculture at Central High School. The author's past experience with such a council has been of immeasurable value to him in this study.

Considerable research is required in the development of a course of study to isolate the problems, formulate objectives, and determine evaluative criteria. Webster's New International Dictionary defines research as, "A careful or critical inquiry or examination in seeking facts or principles; a diligent investigation to ascertain something". The Dictionary of Education defines research as, "Ideally, the careful, unbiased investigation of a problem, based insofar as possible upon demonstrable facts, and involving refined distinctions, interpretations, and usually some generalizations". The author favors this concept of educational research: "A prolonged, intensive, purposeful search to determine what we should do or attempt to do in educating children and adults" (19, p. 23).

To the author, this study is practical research of high order. It has entailed the use of an advisory council to isolate the problems within the vocational agriculture curriculum; to interpret the needed changes in light of existing school and community needs; to integrate these changes or recommendations into a four year course of study; and to establish acceptable criteria for the continued evaluation of the vocational agriculture program.

Educational objectives are not always easily defined. American society is highly diversified, and few significant aspects of its culture are accepted by all the people. Education may be stated as inducing growth and changes in people through new abilities, new interests, attitudes, appreciations, new goals, ideals, standards, and new understandings (8, p. 62). It is obvious then, that educational objectives are constantly undergoing change and, of necessity, differ from community to community and from person to person.

Agricultural education is a branch of education and not a branch of agriculture (8, p. 62). Thus, by its very nature, the objectives of agricultural education must be embodied in the over-all educational objectives of the school system in which it operates. Good education must develop citizens who work as well as play; produce

as well as consume; create as well as appreciate (1, p. 3). Vocational agricultural education is playing a major role in reaching these objectives.

There has been a rapid development of reimbursable vocational education in agriculture as provided under the systems of federal, state, and local cooperation. The program as administered under the Smith-Hughes and George-Deen Acts are very general in nature and permit great variations in practice. The federal grants function in at least three ways to improve vocational education in the states (9, p. 61). Federal allotments are used by states to encourage and help communities with low taxable property to provide better training facilities. Secondly, federal aid is used to assist communities to establish new schools or to expand existing programs to meet growing needs for vocational education. Third, the grants serve to maintain high standards of instruction by setting up certain minimum standards as requirements for federal aid.

Vocational education in agriculture is an educational program designed to meet the needs of farm people, in school and out of school, who are interested in better farming or in becoming established in farming (15, p. 8). The primary purpose of agricultural education is to train present and prospective farmers for proficiency in farming

(3, p. 5). The agricultural curriculum, when based upon the farming conducted in the community, enhances rural living and citizenship by developing skills, abilities, and attitudes essential for farmers.

Reimbursed agricultural education is administered at the federal level by the Agricultural Education Service of the United States Office of Education. At the state level, the program is administered under the State Board of Education, as a division of the Department of Education. Each state is required to submit a plan for using the funds allotted to it. This is done through a projected five year plan, which provides an opportunity to add to the framework of the national regulations. The local program is administered by the board of education of the local school district. As the educational policy making body in the community, it is encouraged to make changes in the program to fit its own school and community needs. These changes must be within the framework of the state plan or regulations.

The success of a local department of vocational agriculture is dependent upon having a community program of agricultural education that meets the needs and is understood by the rural people of the area. Usually, the better programs in vocational agriculture are based upon the agricultural education needs of students in

becoming successfully established in farming. A good program of supervised farming practice will lead boys by the most direct and profitable route to establishment in farming. Such a program provides learning activities in all phases of production, management, research, and marketing of agricultural commodities. Thus, each student may achieve that which best meets his own individual needs.

Planning a program of agricultural education for a school is a comprehensive and intricate task involving many people. Ideally the rural people affected by the vocational agriculture instruction should have a part in the planning and development of any well-balanced farming program (10, p. 23). This bond between the school and community needs to be strong. One of the most effective ways of accomplishing this is through the use of a representative advisory council.

Advisory councils are comprised of local citizens who represent all community interests and have been asked to assist with the development of school policies and programs affecting agriculture. The council serves in an advisory capacity to the board of education and is appointed by the board. The citizens inform the school of the educational needs of farm groups in the community, and school officials inform the council of their needs, facilities, and possibilities for conducting such a program.

STATEMENT OF THE PROBLEM

A most difficult problem for the vocational agriculture teacher is the selection of courses and activities to be included in his instructional program. Far too often, vocational agriculture teachers are unaware of the basic farming needs of their students, or of their community. The situation is further complicated by the fact that farming today requires a complex combination of agricultural skills and abilities. These many phases of agriculture are inter-related in daily and seasonal activities of the farm.

Training in vocational agriculture cannot be given separate and apart from the problems that exist on the student's home farm or in his community. We, who teach vocational agriculture, know that problems represent difficulties to be overcome. These difficulties, which people have, give rise to the problems to be solved. Therefore, each community and each teacher within the community has its own instructional program. A program which offers systematic instruction is preferred to one in which instruction is not related to specific needs.

Democratic education demands that the people concerned with education must have a say in its planning, its operation, and its evaluation. Many mistakes are made when the vocational agriculture teacher assumes he knows

the needs of the students and community. A local advisory council is needed by every vocational agriculture department to plan a program that is appropriate to the needs of the community, to advise on the operation of the program, and to evaluate its progress.

In defining this problem, the author considers the following facts as relevant:

1. A recent national survey indicates that 63 percent of the states provide no state course of study for vocational agriculture. An additional 22 percent provide a state course of study which teachers are encouraged to follow, making changes as deemed necessary. Seven percent of the states provide a course of study guide which teachers are encouraged to follow, making changes as deemed necessary (11, p. 1-4).
2. Oregon has a state course of study guide for vocational agriculture, but teachers are expected to use it only as a means to build their programs around local community needs.
3. State plans for vocational agriculture are too broad and general in nature to serve specific needs in any community.
4. A teacher of vocational agriculture cannot be expected to determine the needs of a community

as adequately as a council of local citizens whose very livelihood stem from that community.

5. The machinery by which teachers can update their instructional program is available in all communities, namely, the local advisory council.
6. There are wide variations in the organization of courses of study in agricultural education in secondary schools. Research in this area has been extremely limited in scope. More research is needed in analyzing needs, allocation of time, distribution of course content, and evaluating the effectiveness of the program.

In view of the foregoing statements, the problem thus becomes one of organizing an advisory council and using it in a systematic way to develop a course of study for the school and community.

What follows may be another thesis to some, but to the author, it is this and more. It is the culmination of ten years of association with an advisory council at Central High School. It has been an adventure in education, which has brought about changes in agriculture in the community and left the author with new concepts of his profession.

NEED FOR THE STUDY

Several factors prompted the author to make this study. Early in 1953, Central High School participated in an evaluation program conducted in cooperation with the Oregon State Department of Education. Although this was a lengthy and informative study, little if any attention was directed to the instructional program. Every recommendation made as a result of this study dealt primarily with improvement of physical facilities.

Second, increased attention is being directed toward related occupations in agriculture. At local, state, and national meetings this has become a topic of prime interest to vocational agriculture leaders. The increased difficulty in becoming established in farming has led many to believe that related occupations provide a means of keeping vocational agriculture enrollment at its present high levels.

A third factor became apparent when members of the advisory council suggested that their sons enrolled in vocational agriculture needed to have an expanded knowledge of farm mechanics. If this was an apparent weakness in the program, then perhaps others could be found which, when improved, would result in a more practical and meaningful program to the students.

Still a fourth factor which prompted the study was

the fact that the vocational agriculture department at Central High School serves as a training center for a number of prospective teachers each year. The department has served as a training center for the past six years. It is imperative that in such centers, the instructional program be of such a type and nature to reflect the highest standards under which a teacher can render effective service.

LIMITATIONS OF THE STUDY

The primary limitation of this study is to a four year high school program of vocational agriculture. The author was fully aware that an effective program of vocational agriculture must also include that of young farmers and adult farmer education. However, time does not permit the inclusion of these areas in this study.

The study was also limited in scope to Central High School and its vocational agriculture program. One of the basic tenets of this study was that a course of study for vocational agriculture must be based upon the agricultural resources and needs of the community. It is hoped that the ensuing study may serve as a guide to other teachers of vocational agriculture faced with the problem of updating their instructional program.

Another limitation dealt with the fact that the

vocational agriculture program at Central High School is a single teacher department. Estimates of future enrollment indicate little change in total numbers enrolled in the program. A multi-teacher department might result in the employment of specialists in certain fields of agriculture.

It was further realized that the study, when completed, would need to be evaluated often to keep pace with the changing times.

DEFINITION OF TERMS

In order for the reader to better understand this study, the following terms are defined:

Vocational Education

In this study vocational education shall refer to that part of an individual's experiences needed by workers to enter and make progress in employment on a useful and productive basis.

Agricultural Education

This term is used to refer to that part of vocational education designed to meet the needs of farm people, in school and out of school, who are interested in better farming or in becoming established in farming.

Community Program

A program of vocational agricultural education based

upon the needs of the local community and utilizing existing facilities and personnel.

Curriculum

The sum total of courses and activities offered in sequence by a secondary school for the purpose of training youth in group ways of thinking and acting.

Course of Study

That part of the curriculum dealing with vocational agriculture and comprising the areas of supervised farming, farm mechanics, and FFA. It includes that instruction given in the classroom, in the farm shop, and on the home farm for each of the four years of the high school program under the vocational agriculture instructor's supervision.

Advisory Council

A committee of laymen who represent all community interests and have been named to assist with the development of school policies and programs affecting agriculture. The council serves in an advisory capacity only to the local board of education.

Advisory Committee

A term used synonymously with that of advisory council.

Farm Mechanics

The practical knowledge of the design, construction, operation, and care of farm machinery. In this study dealing specifically with farm electricity, farm power and

machinery, farm buildings and conveniences, farm shop skills, and soil and water management.

Farm Shop

A term dealing with those manipulative skills taught in conjunction with a farm mechanics program.

Supervised Farming Program

The farming activities carried on by the student in vocational agriculture under the supervision of the instructor. It is meant to include a productive project, an improvement project, and supplementary farm practices.

Improvement Project

Any undertaking which improves the real estate value of the farm, the efficiency of the farm business, or of a farm enterprise, or the living conditions of the farm family.

Supplementary Farm Practice

A farm job or practice outside of those already included as normal parts of a student's productive and improvement projects. These are undertaken for additional experience or skill, or for improving the efficiency of the home farm.

Productive Project

A crop or animal project owned and managed wholly or in part by the student. It is carried through a normal production cycle and may be continued for a longer period of time.

Placement for Farm Experience

A type of supervised farming providing farm experience through employment on a farm. Usually for boys with limited farm experience and inadequate facilities for supervised farming.

Future Farmers of America

As defined in Cook (3, p. 10-11):

"The Future Farmers of America is the national organization of, by, and for farm boys studying vocational agriculture in public secondary schools which operate under the provisions of the National Vocational Education Act. The Future Farmers of America (hereinafter referred to as the FFA in this study) is an intra-curricular part of the vocational education in agriculture of America. It constitutes one of the most effective devices for teaching through participating experiences."

Smith-Hughes Act

An act of the 64th United States Congress setting forth the provisions for vocational education. It provides an annual appropriation for distribution to states for the promotion of vocational education in agriculture, trades and industry, and home economics of less than college grade. It also provides for the training of teachers for these fields.

Young Farmer Program

A program for out of school young men, sixteen years of age or older, who deal with the problems of becoming established in farming.

Adult Farmer Program

A program for adults who are already engaged in farming, and which provides systematic instruction which will help them to develop their abilities to solve specific farming problems.

CHAPTER II

ORGANIZATION OF THE STUDY

The purpose of this chapter is to present information pertaining to the various phases of instruction of a vocational agriculture program, namely: Supervised farming, Future Farmers of America, and farm mechanics. The purpose of each phase is discussed and how each is a part of the vocational agriculture program at Central High School. The reader is also shown how the agriculture advisory council has affected each phase of the program at Central High School.

SUPERVISED FARMING PROGRAM

The supervised farming program is an integral part, and one of the most essential phases of vocational agricultural education. The intent of the original Smith-Hughes law passed in 1917 was to make agricultural education vocational in nature. In order to receive federal reimbursement money, the school must include a supervised farming program in agriculture for each student, either on a farm provided for by the school, or on the student's home farm, for a minimum period of six months. Studies have shown that students of vocational agriculture most likely to farm are those who develop better than

average programs of supervised farming (16, p. 108-109). Those abilities needed by persons for success in farming can best be developed by providing true-to-life problems for study and carrying the learning process to the doing level.

The objectives of a supervised farming program have but one central purpose-- to provide farm boys with a well rounded farming experience, so they may learn to do what a good farmer must do. These objectives may be stated as follows: To provide experiences which contribute to the development of abilities needed for proficiency in farming; to aid in progressive establishment in farming; to improve farming at home and in the community; to contribute to the attractiveness of farm home and farm life; to provide a means of earning money; to develop increased interest in agriculture and farming; and to develop attitudes and abilities of cooperation (4, p. 18). The attainment of these objectives requires that there be a definite relationship between the course of study and the supervised farming program of the students.

A broad program of agricultural education offers four phases of supervised farming activities. These would include productive projects, improvement projects, supplementary farm practices, and placement for farm experience. Productive projects, of necessity, must be

adapted to the farm, be of large enough scope to warrant the interest of the boy, and offer an opportunity for knowledge and skills necessary in farming. These projects are made up of one or more farming enterprises, and may continue through one production cycle or for a longer period of time.

Improvement projects serve to vitalize the agricultural education program by developing an interest and willingness on the boy's part to improve his home farm environment. In connection with their home farms, some students of vocational agriculture have been instrumental in developing improvement projects which involve soil fertility, conservation, farm organization, home beautification, and land use.

Supplementary projects serve to provide additional experiences important to the development of proficiency in farming. Docking, castration, vaccination, fitting and showing an animal, and culling the laying flock are examples of experiences important to the development of proficiency in farming. These experiences, of short duration, serve to acquaint the student with the necessary skills required of a modern day farmer.

Placement for farm experience makes provisions for those students of limited experience and farming facilities to gain knowledge through employment on a farm. It may involve the transfer of a boy living on a farm to some

other farm, if his opportunities for experiences at home are limited, or if, for other reasons, he desires experiences not available at home. Thus a boy is able to gain practical farming experience under the direct supervision of his employer and guidance from his vocational agriculture instructor.

In vocational agricultural education, increasing attention is being given to building instruction around programs of supervised farming and related activities. This provides for a functional and integrated program of learning. The problems encountered on a supervised farming project make for enlightened learning, when made a part of the classroom instruction. Likewise, the classroom is the logical place to initiate programs of supervised farming, to develop objectives for these programs, and to organize activities which are fundamental to the development of sound agricultural practices.

As students move ahead in the development of their programs of supervised farming, they encounter problems which must be solved if their programs are to be successful. Successful teachers will use discussions, individual conferences, surveys, field trips, home farm visits, and other devices for guiding students to a satisfactory solution. Classroom instruction should be so planned that

students who have been placed for farm experience will receive assistance in planning for the various farm activities they will encounter.

Vocational agriculture teachers must develop or acquire certain competencies or effective abilities for guiding and directing programs of supervised farming. It would seem that the following abilities are those most needed by teachers, if they are to guide their students in developing good programs of supervised farming (4, p. 475).

1. A broad concept of supervised farming and the conviction that it has an essential place in vocational agriculture.
2. An understanding of acceptable standards of achievements in supervised farming, and how these may be utilized in the formation of goals by individual students.
3. A sincere interest and liking for farming and rural people.
4. Abilities and skills necessary for success in farming, and their relationship within the farm business.
5. Ideals and standards for what constitutes good farming.
6. A contagious enthusiasm which inspires persons

to higher levels of achievement in supervised farming.

7. An understanding of the students, including their individual differences, their interests, capacities, and need for supervised farming.

The supervised farming program, and in turn the course of study of a vocational agriculture department, is shaped by the type of farming conducted in the community. A student learns agriculture, in part, by practicing it at home. This type of education touches the lives of a large part of the community. It is of such importance that it should not be the responsibility of any one individual. The use of an advisory council is one of the better ways to plan a supervised farming program based upon the actual needs of the community. When a vocational agriculture department has the guidance of such a group, it is stimulated to recognize areas in the farming and farm life of the community needing improvement, and plan ways to improve them.

The advisory council is not new in the agriculture department of Central High School. The advice and recommendations of the council have been used since 1949. The geographical conditions of the school district and types of farming practiced make an advisory council imperative. The council has succeeded in improving the supervised

farming program by:

1. Stimulating interest in certain enterprises which should become more popular in the community.
2. Aiding the instructor in planning and development of an annual and long time agricultural program.
3. Helping to forecast the possible success or failure in various enterprises the students use in their supervised farming program.
4. Locating breeding stock and establishing livestock chains for students.
5. Selection of the outstanding farming project within the vocational agriculture department.
6. Counseling young men interested in becoming established on farms as to the opportunities and location of available farms.
7. Making recommendations as to the use and management of the school farm.
8. Advising as to the selection and maintenance of farm machinery.

FUTURE FARMERS OF AMERICA

The Future Farmers of America is an organization that provides the opportunity for farm boys to learn and develop leadership, citizenship, and cooperation. It is one of the most powerful motivating forces in

agricultural education. It is that which adds glamour, competition, and individual development to an instructional program.

The FFA, as it is often called, is a non profit, non political farm youth organization of national scope. Its membership is limited to farm boys, 14 to 21 years of age, preparing for farming through vocational agriculture. The organization had its beginning with the Smith-Hughes Act in 1917, but it was not until 1928 that the FFA became a national organization. Today the FFA is to be found in every state of the United States, and in Puerto Rico and Hawaii. It boasts a membership of over 380,000 making it the largest farm boy organization in the world.

The Future Farmers of America is to vocational agriculture as supervised farming, farm mechanics, or any other phase of the program is to vocational agriculture. Its primary purpose is to develop agricultural leadership, citizenship, and cooperation. Its goals are closely related to the primary goals of education in general, namely: Health; command of fundamental processes; worthy home membership; vocation; citizenship; worthy use of leisure time; and ethical character (14, p. 7). The statement in the official FFA manual regarding the foundation goals of the FFA organization includes: Leadership and character development; sportsmanship; cooperation; service; thrift; scholarship; improved

agriculture; organized recreation; and patriotism (6, p. 5). The challenge to educators in the field of vocational agriculture is to direct the activities of the organization toward the achievement of these goals.

At least three highly important and valuable types of activity stand out in the FFA program. The first of these values to be derived from FFA activities is the training and experience which the individual boy receives in working with others as part of a group in chapter, district, and higher organizations. This value derives from a number of activities, such as working as a committee member, chairman, chapter officer, and from learning and experiencing the correct handling of a business meeting. The FFA develops within its members the ability to participate as an intelligent member of a group and to operate as a responsible citizen within larger groups.

Another value of the FFA is in participation in cooperative activities. As a participant in a cooperative activity, the individual member finds himself part of a group working toward a well defined goal. He learns to delegate and to accept responsibility. He learns to count the costs of the action involved. He learns to evaluate the results achieved. Experience gained in sound, well planned, and well managed cooperative activities will make of the FFA member a better farmer and a better citizen.

A third value to be derived from FFA membership is training and experience in community service. Community service in the FFA has a definite place. Service activities should be based upon the needs of the community and centered around two major objectives: The solving of problems considered acute, and the solving of problems that are far reaching. The solving of both are essential to the community. It is through community service activities such as community campaigns for the control of livestock parasites, community beautification, reforestation, and soil conservation projects that students learn to recognize community problems and how to solve them. Thus, many facets of learning may be accomplished in this manner while serving to teach citizenship and proficiency in farming.

The Future Farmers of America program must be integrated into the whole of the vocational agriculture education program. It is an intra-curricular activity having its origin and root in a definite part of the school curriculum--vocational agriculture. The FFA is the show window of the boys' doing in vocational agriculture. It is but one phase of the vocational agriculture program that also includes classroom, supervised farming, and farm mechanics instruction. The FFA and vocational agriculture cannot be separated in and of themselves, for

there is so much over-lapping that one cannot be distinguished from the other. To get the greatest benefits from FFA activities, we must consider it for its educational worth and integrate it into the total program of study. This places the FFA in the proper light and in a position to receive the most respect from the teacher, the pupils, the administration, and the public.

The FFA is an integral part of the vocational agriculture program at Central High School

1. Its members participate in public speaking, parliamentary procedure, livestock, dairy, and poultry judging contests on the local, state, and national levels.
2. Each member is provided an opportunity to serve as a member of a committee of his choice.
3. Regular meetings are held to conduct chapter business.
4. Cooperative activities and community service projects are undertaken only after thorough discussion and evaluation of their outcomes.
5. A parent and son banquet is held to inform parents and friends of the accomplishments of the organization.
6. Radio and television programs are presented regularly.

7. A thirty acre farm is managed and operated jointly by the members.
8. Equipment valued at \$3000 is owned, operated, and maintained by chapter members.

Many other such activities tend to stimulate interest in vocational agriculture. The Future Farmers of America organization serves to bind the many phases of vocational agriculture into one complete program of vocational agricultural education.

The advisory council has been of valuable assistance to the Central FFA chapter in its activities. It has:

1. Recommended the feasibility of a tractor for the agriculture department from the standpoint of being educationally and financially sound.
2. Studied each bid submitted by implement dealers and made suggestions.
3. Interested additional implement dealers in entering the competition.
4. Recommended that the FFA chapter sell bonds to finance the tractor.
5. Pointed out to school authorities the need for help in financing the tractor.
6. Annually, select the winners of the Safeway Initial Project Award contest.
7. Annually, select the chapter Star Farmer, and

Better Farming contest entry.

8. Supplied 300 pounds of barley and 500 pounds of oats to plant the school farm.
9. Recommended the FFA chapter plant Christmas trees on a portion of the school farm.
10. Attend each and every parent and son banquet as guests of the chapter.

FARM MECHANICS PROGRAM

The farm boy enrolled in vocational agriculture is the farmer of the future. He needs to be trained in the knowledge, skills, ideals, and appreciations that he will need to meet the mechanical problems with which a progressive farmer has to deal. The trend towards more farm mechanization has made farm mechanics instruction increasingly more important in vocational agricultural education.

Farm mechanics is one of several parts of a vocational agriculture program. Farm mechanics instruction includes all the unspecialized mechanical activities needed on the farm and in the home. The farm mechanics program needs to be sufficiently broad to provide the individual student with experiences that will enable him to become a proficient farmer. These objectives may be stated as follows: To give practical training and develop abilities in the care and use of farm tools; to provide training in the selection and use of different kinds of shop materials; to develop

qualities of good workmanship; to develop skills in various areas of farm mechanics; to develop good work habits, attitudes, and judgements; to provide an opportunity to construct and repair worthwhile farm mechanics projects; and to encourage each student to develop a home farm shop.

Experience gained in farm mechanics should contribute to the needs of the student's home farm. Farm mechanics needs grow out of the relationship of the student to his home environment. It is necessary to understand each student and his home farm in order to help him recognize his needs in this area. The farm mechanics instruction should be closely related to the student's supervised farming program, including productive, improvement, and supplementary farm practices.

The farm mechanics shop is a place for individual students to develop many different mechanical abilities. The shop is designed, equipped, and organized to provide instruction in many different areas such as woodworking, welding, farm machinery, tool repair, and electricity. Learning activities need to be adapted to the maturation level of each student. Normally, instruction progresses from the less difficult manipulative skills to the more difficult. Instruction is distributed throughout the four year instructional program, enabling the student

to profit from previous learning experiences and keep pace with the changes in his environmental needs.

A modern course of farm mechanics instruction will provide instruction in five basic areas, namely: Farm electrification, farm power and machinery, farm buildings and conveniences, farm shop skills, and soil and water management (18, p. 5-10). Problems or farm mechanics jobs exist on the farm in each of these areas. The course content should come from those problems to be solved or jobs to be performed that result in the necessary abilities needed to operate the farm. How well these are accomplished will depend upon the student's interest, readiness, and proficiency in performing the job or managerial decision.

Rural electric lines have been extended to make electric power available to 95 percent of the nation's farms. A multitude of uses are being found for this new power, both in the home and on the farm. An expanded program of rural electrification activities would include the following areas of instruction: Reading an electric meter; safety; simple repairs to electrical systems; principles of electricity; wiring materials and equipment; and protection of electrical circuits. In addition, instructions should be centered around the application of electricity to farm jobs. The supervised farming program and home farm environment offer many opportunities for the

development of this phase of farm mechanics.

Approximately, seven percent of the farm mechanics program at Central High School is devoted to farm electrification. The primary purpose of this instruction is to develop an understanding of the principles of electricity, and the development of electrical skills that will be useful in adapting electricity to the needs of the home farm. Farm electrification is integrated into the vocational agriculture program. Students are encouraged to build needed equipment requiring the use of electricity; to make minor repairs on electrical equipment and motors; to select and maintain various types of electrical equipment; and to install and test different wiring systems.

On many farms the value of the farm tractor and farm machinery is equal to, if not greater than, the value of the land (18, p. 1). It is readily seen that farm power and machinery should play an important part in farm mechanics instruction. The objectives are: To develop an understanding and appreciation of the physical and mechanical aspects of farming; to develop abilities to deal with the engineering aspects of farm mechanics; and to develop abilities to perform the necessary operations or processes involving the use of tools, machinery, and mechanical equipment. An effective program would develop

the following student understandings:

1. Selection of power units for the home farm.
2. Determining costs, interest, and insurance on farm machines.
3. Operating, servicing, and adjusting common power units.
4. Locating and remedying common operating troubles.
5. Safe operating practices for farm equipment.
6. Recognizing the need for major repairs involving special equipment or skill.

One third of the farm mechanics program at Central High School is in the area of farm power and machinery. The importance is emphasized by the vast numbers of tractors, gasoline motors, and powered equipment on students' home farms. In addition, a small tractor and full line of equipment is on hand to care for the 30 acre school farm. All students share in the operation and maintenance of the school tractor and equipment. Farm equipment is repaired, rebuilt, painted, and returned to use on the home farms. Gasoline motors are overhauled and serviced for winter storage. Farm implements are adjusted and put into proper working condition. Projects are constructed employing the use of power or machinery. Field trips are taken and studies made of farm machinery costs and maintenance.

Farm buildings are tools of production. They are used to make money just as the tractor, fertilizer, or feed. This phase of farm mechanics develops understandings of basic principles involved in: Organizing and planning a farmstead layout; remodeling existing buildings to meet production requirements; planning and executing building maintenance programs; selecting and building equipment for the home and farm; selecting suitable building materials; and developing a safety program for the home and farm buildings.

Twenty four percent of farm mechanics instruction is devoted to farm buildings and conveniences. This phase is closely integrated with the supervised farming program and the needs of the home farm. Learning activities include: Reading blueprints, laying out building foundations, roofing buildings, painting, farmstead drainage, construction of feeding and watering devices, building farrowing houses, sheep barns and other types of farm buildings, construction of trailers, wagons, elevators and other farm implements. Home improvement projects and community service activities often provide additional opportunities for learning.

A fourth phase of farm mechanics instruction is farm shop skills. This is not to infer that shop skills are taught separately in the vocational agriculture

program. Rather, farm shop skills overlap into each of the other farm mechanics areas. A farm shop skill can be identified as the proficiency or degree of proficiency acquired in performing a shop job or operation. It is important that students acquire a basic understanding and reasonable ability to perform these skills essential for proficiency in farming.

At Central High School, approximately 19 percent of instructional time is devoted to farm shop skills. This includes instruction in electric welding, oxyacetylene welding and cutting, cold metal work, forging, fitting and sharpening tools, plumbing, sheet metal work, use of power tools, use of hand tools, and concrete masonry. Many of these skills are taught in the first and second year of the program. These skills serve as the framework for a course of instruction based upon the needs and abilities of the individual student.

Soil and water management is of vital importance to the farmer. Water in the soil, either too much or too little, is the most common limiting factor in crop production (13, p. 75). Holding the soil in place against erosion and keeping the soil productive over the years are stressed in this phase of farm mechanics instruction. The necessity for the return of organic matter, fertilization, crop rotations, drainage, irrigation, as well as

appropriate tillage at the right time under the right conditions also receive attention. Continued neglect and mismanagement of soils leads to lowered crop yields and eventual abandonment. A well planned, well understood, and well carried out program of soil management means soil that will continue to produce satisfactorily in accordance with its capabilities.

The constant aim and purpose of every owner and operator of land should be to keep its inherent productivity high. To develop this basic understanding, 17 percent of the farm mechanics instruction is devoted to soil and water management. Students of vocational agriculture at Central High School are given the opportunity to:

1. Plan simple farm drainage systems.
2. Run elevations and contours by using the farm level.
3. Read aerial photographs.
4. Draw a soil map to scale.
5. Read a legal land description.
6. Estimate costs of construction of underground drainage system.
7. Test soil for plant food deficiencies.
8. Rate soil in the community as to value and productivity.
9. Plan and lay out sprinkler irrigation system.
10. Estimate costs and power requirements for a

sprinkler irrigation system.

11. Compare fertilizer materials and costs.
12. Control erosion as it relates to farming practices in the community, including an understanding of the basic causes.
13. Develop a cropping system for their home farm.
14. Study reclamation needs of farm used as class project in farm management.

Many accomplishments in farm mechanics have come about as the result of suggestions made by the advisory council. This sound advice resulted in numerous improvements to physical facilities and course content. These achievements may be listed as follows:

1. Recommended the purchase of a farm level and levelling rod for the vocational agriculture department.
2. Recommended a soils course for adult farmers of the community. This course has been successfully repeated three times.
3. Surveyed proposed site of athletic field and drew up plan for a drainage system.
4. Studied plan for irrigation system for school grounds and made suggestions and recommendations.
5. Supplied scrap metal for welding instruction.
6. Recommended changes in course of study to provide

for additional instruction in welding and less in rope work and soldering.

9. Reviewed physical needs of the department and made the following recommendations:
 - a. The purchase of additional shop equipment and power tools for instructional purposes.
 - b. The present shop building be remodeled to provide for lumber storage.
 - c. That an area north of the present building be black-topped to provide better access to the shop building.
 - d. That in a proposed new shop building, space be provided for storage of farm machinery.
10. Recommended changes in farm electrification to provide for more instruction in selection and maintenance of electric motors.

HISTORY AND BACKGROUND

An advisory council for vocational agriculture was organized in 1949 as the result of a school consolidation movement. The communities of Monmouth and Independence are located two miles apart on Oregon Highway 22. Each community has a population of approximately 2,000 people. Separate school systems were maintained by each community until 1949, when the two areas were consolidated into one

first class school district. A vocational agriculture program had been in effect in the Independence schools since 1921. No such program was in existence in the Monmouth school system. The resulting effect of the consolidation movement of the vocational agriculture program was to advance the department from a part-time status into a full-time status.

The agriculture of the district is extremely diversified. Sheep, dairy and swine are the major livestock enterprises. The area is a heavy producer of vetches, peas, wheat, oats, and barley. Major irrigated crops include sweet corn, strawberries, beans, hops, and asparagus. Cherries and prunes are well adapted to the soil conditions found at the higher elevations. New and improved grass seed crops are playing an important part in the agriculture of the region. Approximately 70 percent of the community income is derived from agricultural sources.

The political significance of uniting two communities, Independence and Monmouth, into one unified district made it necessary to build a new high school half way between the two cities. Central High School, as it is appropriately named, has an enrollment of 395 students. These students come from 17 communities located in and around the cities of Independence and Monmouth. Students are transported daily by eight busses from as far as 18 miles from the north,

two miles from the east, 21 miles from the south, and 15 miles from the west. In total area, the school district covers approximately 144 square miles. The vocational agriculture department maintains an average yearly enrollment of approximately 50 students. They compose about 90 percent of the farm boys in the school system.

The organization of an advisory council to the vocational agriculture department was made necessary by the increased enrollment of students in the program and the diversity of agricultural enterprises in the community. At the same time, the council provided an opportunity to draw the two communities closer together by cooperating in such a program. In the beginning, the advisory council had six major objectives, namely:

1. To develop a sound agricultural program for the entire district based upon the actual needs of the farmers in the district.
2. To serve as a means of informing school administrators of certain policies or needs which would enhance the school's efficiency.
3. To aid the agricultural teacher in becoming better informed as to "what to teach".
4. To assist in promoting and organizing adult farmer classes based upon needs as seen by the farmers themselves.

5. To aid the teacher in obtaining help in special problems.
6. To offer active support in the matter of public relations.

The initiation of the beginning steps toward determining the need for and organization of the advisory council was the joint responsibility of Dr. Henry TenPas, Oregon State College, Mr. George Corwin, Superintendent of Schools, and the author. The board of education gave approval to the plan and welcomed it as a forthright step in the educational program of the school system.

The selection of council members is one of the most important phases in organizing such a group (5, p. 15). Several successful farmers of long standing in the community were contacted for assistance in suggesting names of those who would be of assistance to the vocational agriculture program. These candidates were interviewed by the author and screened on the basis of:

1. A willingness to devote adequate time to the work of the council.
2. Leadership and aggressive qualities.
3. Demonstrated ability through successful farming methods.
4. High moral character.
5. Interest in the welfare of all members of the community.

The size of the council will depend upon the type of farming in the community, total population of the school district, and number of communities included in the school service area. To be a truly representative council, membership should come from:

1. Farmers who are successful producers of those agricultural commodities produced locally.
2. Large and small farm operators.
3. Members of farm organizations.
4. Business persons who have indicated an interest in the farm program.

Nine members compose the Central Agricultural Advisory Council. The nominations were made by the school superintendent, high school principal, and the author. The names were submitted to the board of education for approval. The superintendent notified each member by letter of his appointment. In the beginning, four members were nominated from the Monmouth area, four from the Independence area, with one member, a businessman, nominated at large. In subsequent years, there has been less need for a division of the council along community lines. More attention has been given to the selection of members representing the agricultural interests of the community.

One of the initial steps in the organization of the advisory council is the development of a constitution and by-laws to govern the action of the council (Appendix A).

Officers need to be elected, term of office to be decided upon, duties of each council member explained, and objectives of the council formulated. It is imperative that members come to understand and accept that the council acts only in an advisory capacity to the local board of education.

A major issue confronting the advisory council in its early formation was an understanding of the aims and purposes of vocational agriculture. Later the council concerned itself with a detailed study of the physical facilities proposed for the vocational agriculture department in the new Central High School. This included a study of the shop and classroom arrangement; tool storage; equipment needs; and provisions for a school farm. Such a study resulted in material saving to the school district, as changes were able to be made while the building was still under construction. This study was of invaluable assistance to the author in planning for the physical needs of a modern vocational agriculture department.

Providing adult education for farmers of the community warranted the attention of the council during its second year of operation. It was recognized by the council of the need existing for improving farming practices within the community. The post World War II era was upon the farmer. His success in farming became more and more dependent upon adapting his farming practices to the technological advances

being made in agriculture. The vocational agriculture department within the school system was the logical avenue through which such a program could be achieved.

It was evident that the effectiveness of an adult program would be contingent upon selection of an area of instruction in which there was the greatest need. This not only required a study of community practices but involved group analysis of economic factors and farmer interest. A ten week course on soil management was proposed. The council was of the opinion that in this area lay the greatest community interest and need. The council participated in the organization of the course to the extent of:

1. Outlining a tentative schedule of ten meetings.
2. Meeting with the instructor and planning course content based upon community needs.
3. Recommending a five dollar tuition fee be charged those enrolled.
4. Assisting in advertising the course by personal contact with friends and neighbors.
5. Assisted in evaluation of the course as it progressed and again at its conclusion.

Some measure of the success of the course is evidenced by the 62 farmers enrolled in the class. A more indicative measure is to be found in the soil building, soil maintenance, and fertilizer practices adopted by those farmers participating in the class.

The need of a school farm and its relationship to a vocational agriculture department was another cause of study to the council. The board of education had offered 15 acres of school land to the vocational agriculture department as a laboratory farm. This opportunity to put into practice farming techniques and skills prompted the council to recommend that the department assume the responsibility for operation of the farm. The council gave enthusiastic support to this venture by:

1. Recommending the board of education lease the land to the vocational agriculture department on a rent free basis.
2. Recommending the sale of non interest bearing bonds to finance the purchase of a tractor and machinery.
3. Studying each machinery bid submitted and making recommendations.
4. Donating seed to plant the first year's crop.
5. Giving counsel and guidance to the development of a long time farming program for the school farm.

Due to recent developments in agriculture, it was important that the council examine the course of study to determine clearly the objectives and direction of our vocational agriculture program. It is not a problem that can be solved by decree from the national or state level. Rather,

it is at the community level that the effectiveness of a vocational agriculture program can be most accurately evaluated. State and national programs reflect the type of program being conducted on the local level. An effective program of vocational agriculture should contribute to the progressive establishment of young men and adults in farming. It should improve the quality of living of the farm families residing in the community.

The increased emphasis on farm mechanization and its inherent effect upon the farm mechanics instruction was chosen as the first area of study. Its purpose was to evaluate the existing farm mechanics instruction in the vocational agriculture department in view of present day needs. To pursue a study of this type required a number of meetings. It was necessary for the council to conduct a preliminary survey of the department facilities and equipment to ascertain what was available for teaching farm mechanics. The council was divided into two sub committees for this purpose. The equipment committee was responsible for a study of the number, kind, and condition of tools in the farm shop. The facilities committee was responsible for a study of storage, visual aids, and shop arrangement. Each committee, in turn, reported on its findings. Conclusions were drawn, and the following recommendations were made:

1. A lumber storage area be constructed above the boys'

rest room, utilizing an area of wasted space.

2. That in a proposed new shop building, an equipment area be planned for the storage of school farm equipment.
3. Automotive tools be purchased as funds permit in order that more instruction be given in motor maintenance.
4. A radial arm saw be purchased to replace an old model tilting table saw.
5. An additional electric welder be purchased to be used by both day school and adult classes.
6. Pave with asphalt an area 16 feet by 80 feet to facilitate entrance to north end of shop building.

Farm mechanics programs that are most functional are those that have been developed as a result of a careful study of the students' needs. Today, practically every farmer has a tractor and machines to go along with it. He has problems with his farm buildings, with electricity, and with soil and water management. The course content of a farm mechanics program must be derived from those problems that result in the needed mechanical abilities to operate a farm. These jobs, in turn, must be further divided upon the basis of the student's interest, readiness, and ability. Nearly a year was spent by the advisory council in an evaluation study along these lines. Francis Holt, a large manufacturer of farm

machinery and member of the council, assumed the leadership for this important study. Each phase of the program was carefully studied. Recommended changes were made when necessary to bring the program into adjustment with community needs. As a result of this study, the council recommended:

1. That more attention be given to instruction in farm motors and motor maintenance.
2. That more time be given to instruction in repair and maintenance of farm machinery.
3. That rope work be discontinued as a part of the course of study.
4. That less time be devoted to sheet metal operations.
5. That forging operations be limited to bending and tempering metals.

Progress is being made toward implementing these recommendations into the farm mechanics program at Central High School. The council's recommendations have served to revitalize the farm mechanics instruction. There is a greater student interest, more student participation in farm shop activities, and a better understanding of farm machinery, maintenance, and their relationship to each other.

A sound course of study must be based upon a challenging program in both farm mechanics and agricultural science. Each year, it should provide for gradual ascension in difficulty of material in keeping with the student's learning

ability (12, p. 47-68). In agricultural science, any live-stock enterprise can begin with basic information as breed identification, and then progress through feeding, breeding, disease control, marketing, to challenging farm management studies. The course of study should parallel the student's ability and capacity to learn so that he feels a sense of development. The task confronting the advisory council at the present time is to build such a program of vocational agriculture that in scope and quality is rewarding to the student and the community.

To evaluate a course of study is to appraise carefully. This requires painstaking judgment. Since vocational agriculture programs vary from community to community, evaluation must be done on a local basis. Because of their farming experience and knowledge of community problems, the advisory council was used to assess the true worth of the vocational agriculture department course of study. The initial step in such an evaluation program required the council to become familiar with the course of study currently in use. Several meetings were held to explain and discuss the course of study. The superintendent of schools, and the principal of Central High School worked closely with the council on matters pertaining to school policy. Once the council became informed as to what was being taught, the way was clear to reorganize the course of study to fit the needs of

the school and the community.

It became evident that a systematic method must be devised if a comprehensive evaluation study was to be made. The council was divided into three sub committees to facilitate study of the program. Each committee met separately in their own geographical area. Suggestions for the improvement of the course of study were recorded and presented at a later date before a regular council meeting. Each suggestion was discussed thoroughly and evaluated on the basis of student and community need. Recommendations were made by a majority vote of the council members present. These recommendations were:

1. Agriculture I

- a. Classified poultry as a minor farm enterprise in the community, and reduced instruction time by one week.
- b. Recommended an additional week of instruction be devoted to the area of farm crops.

2. Agriculture II

- a. Recommended that additional time be devoted to farm buildings, to include types of farm buildings, building materials, and methods of construction.
- b. That a unit be given on farm fencing.
- c. That farm crops instruction be limited to those

crops adapted to the community.

3. Agriculture III

- a. That instruction in farm electricity be reduced from six to five weeks and less time to be devoted to manipulative skills.
- b. That a unit on swine production be substituted for one in poultry production in view of community interest and need.
- c. That one week of instruction be offered in crop production, emphasizing plant diseases.

4. Agriculture IV

- a. That one week be devoted to a study of types and sources of farm credit.
- b. That shop work be curtailed by two weeks to allow for a study of the more common insect pests and their control measures.

CHAPTER III

FINDINGS OF THE STUDY

The purpose of this chapter is to present the course of study for Central High School as determined by the cooperative efforts of the instructor, school administration, and agricultural advisory council. The following proposed instructional program is not all inclusive or complete and should be used as a guide only. It is further recognized that the interests and abilities of students enrolled in the vocational agriculture program will, to a large extent, determine the progress or achievements made.

CENTRAL HIGH SCHOOL VOCATIONAL AGRICULTURE
COURSE OF STUDY
AGRICULTURE I

First Week

Introduction to Vocational Agriculture

- A. Explanation of vocational agriculture program
- B. Farm survey and its importance
- C. Map of home farm, color with soil types and legal description

Second Week

Introduction to F.F.A.

- A. Explanation of F.F.A. program

- B. History and organization
- C. Motto, symbols, creed
- D. National, state, and local organizations
- E. F.F.A. activities, program of work, state and American farmers, etc

Third Week

Farming Opportunities in our Community

- A. Livestock
 - 1. Dairy
 - 2. Beef
 - 3. Sheep
 - 4. Swine
 - 5. Poultry
- B. Crops
 - 1. Cereal grains
 - 2. Grasses
 - 3. Legumes
 - 4. Specialty crops

Fourth Week

Project Planning and Selection

- A. Requirements for a satisfactory project
- B. Sample budgets for various farming enterprises
- C. Elements of a good business agreement

- D. Written agreement for at least one enterprise 54

Fifth Week

Tractor Maintenance and Operation

- A. Operating a tractor safely
- B. Lubricating the engine and transmission
- C. Servicing air cleaners
- D. Lubricating and adjusting wheel bearings
- E. Maintenance of hydraulic system

Sixth Week

Tractor Operation

- A. Attaching plow and obtaining proper adjustment
- B. Attaching drawbar
- C. Laying out fields for plowing
- D. Demonstration and practice tractor operation in plowing, disking, etc.

Seventh Week

Project Records

- A. Explanation of Oregon project record book
- B. Sample problems and practice in making entries in book
- C. Complete and enter survey, map, budget and business agreement in new book

- D. Explanation and planning of improvement and supplementary projects

Eighth Week

The Dairy Enterprise

- A. Testing milk for butterfat, demonstration and practice
- B. Producing high quality milk
- C. Dairy cattle breeds

Ninth Week

Dairy Herd Selection and Management

- A. Dairy cattle judging for type
- B. Dairy cattle breeding
 - 1. Recognizing heat period
 - 2. Age and weight to breed
 - 3. Breeding records
 - 4. Artificial insemination

Tenth Week

Dairy Herd Management Continued

- A. Care of cow at calving time
- B. Raising the dairy calf
- C. Dairy cattle diseases, prevention, and control
 - 1. White scours
 - 2. Mastitis
 - 3. Brucellosis
 - 4. Flies and grubs

5. Foot rot

6. Bloat

Eleventh Week

Feeding the Dairy Cow

- A. Explanation of feeding terms
- B. Proteins
- C. Minerals
- D. Vitamins
- E. Carbohydrates
- F. Each boy work out a feeding program
for his livestock

Twelfth Week

Preliminary Shop Skills

- A. Shop safety and shop procedure
- B. Tool identification
- C. Use of the square
- D. Use of the cross cut and rip saws
- E. Use of the power radial arm saw

Thirteenth Week

Beginning Carpentry Continued

- A. How to figure bill of materials
- B. How to use the common hand planes
- C. How to sharpen a plane iron
- D. Common wood joints and how to make
- E. How to bore holes with wood bits and
fasten stock with screws

Beginning Carpentry Projects

- A. Have students select a carpentry project that will employ the above skills such as saw horse, mail box, salt box, etc.
- B. Draw up bill of materials, working drawing
- C. Sandpaper finished project and paint

Fifteenth Week

The Sheep Enterprise

- A. Study of breeds common to the community
- B. Sheep selection
- C. Breeding, flushing the ewes

Sixteenth Week

Sheep Management Continued

- A. Care of ewe at lambing time
- B. Docking and castrating lambs
- C. Sheep records
- D. Field trip to observe lambing procedures

Seventeenth Week

Sheep Management Continued

- A. Feeding of sheep
 - 1. Wintering pregnant ewe
 - 2. Creep feeding lambs
 - 3. Fattening lambs for market

4. Develop rations for each of the 58
above conditions

B. Sheep diseases, prevention and control

1. Pulpy kidney
2. Internal parasites
3. External parasites
4. Pregnancy disease

Eighteenth Week

Additional Farm Shop Skills

A. Sheet metal

1. Operation of blowtorch safely
2. Fluxes for different metals
3. Each student make a tin strip
employing the use of a leak
joint and lap joint in fastening
metals together
4. Sweat a patch over a hole

B. Semester exam

Nineteenth Week

Additional Farm Shop Skills Continued

A. Shaping, sharpening, and tempering
cold chisel

B. Tool sharpening

1. Twist drills
2. Axes

C. Fitting farm tool handles

Twentieth Week**Poultry Enterprise**

- A. Importance of and requirements for good poultry production
- B. Breeds common to the community
- C. Poultry housing and equipment
- D. Chick brooding
- E. Culling the poultry flock

Twenty-first Week**Poultry Enterprise Continued**

- A. Feeding the laying flock
- B. Marketing live poultry
- C. U.S. market grades of eggs
- D. Poultry diseases, preventive and control
 - 1. Coccidiosis
 - 2. Pullorum
 - 3. Lice and mites

Twenty-second Week**Parliamentary Procedure**

- A. Privilege motions
- B. Subsidiary motions
- C. Incidental motions
- D. Each student act as chairman for ten minutes

Twenty-third Week**Additional Farm Shop Skills**

- A. Use of the drill press
- B. Use of the grinder
 - 1. Kinds and shapes of stones
 - 2. Dressing a wheel
 - 3. Safety

Twenty-fourth Week**Additional Farm Shop Skills**

- A. Mixing, pouring, curing of concrete
- B. Use of bolt threading equipment

Twenty-fifth Week**Public Speaking**

- A. Selection of topic
- B. Selection and organization of materials
- C. Each boy prepare and present a three minute talk on some phase of agriculture

Twenty-sixth Week**Swine Production**

- A. Breeds common to the community
- B. Swine judging and selection
- C. Housing and equipment

Twenty-seventh Week**Swine Management**

- A. Swine breeding
- B. Care of sow at farrowing

- C. Weaning and castrating
- D. Spring and fall management

Twenty-eighth Week

Swine Management Continued

- A. Swine feeding
 - 1. Wintering rations for sows and gilts
 - 2. Fattening rations
- B. Swine records
- C. Swine registration
- D. Swine diseases
 - 1. Internal parasites
 - 2. External parasites

Twenty-ninth Week

Farm Crops

- A. Spring seed bed preparation
- B. Budgets for spring crops
- C. Varieties of spring crops to plant
 - 1. Community practices
- D. Each student participate in preparation of spring seed bed on school farm

Thirtieth Week

Farm Crops Continued

- A. Fertilizer applications to spring crops
- B. Seeding rate

- C. Disease of cereal grains
- D. Treating seed for smut and rust
- E. Harvesting methods

Thirty-first Week

Farm Shop Construction

- A. Each boy survey home farm for possible jobs
- B. Draw plans, bill of materials for shop jobs
- C. Make budget of costs for project
- D. Select materials needed for jobs

Thirty-second Week

Farm Shop Construction Continued

- A. Individual instruction on job basis

Thirty-third Week

Farm Shop Construction Continued

- A. Individual instruction on job basis
- B. Complete construction of farm shop project

Thirty-fourth Week

Farm Shop Construction Continued

- A. Selection, mixing of paints
- B. Paint brushes, use, care, storage
- C. Paint shop project

Thirty-fifth Week

63

Summer Program

- A. Record keeping during the summer
- B. Summer project problems
- C. Preparation and showing at fairs

Thirty-sixth Week

Review and exams

- A. Review semesters work
- B. Final exams
- C. Pay all bills and clear department

First Week

Project Records

- A. Bring project records up to date
- B. Long time farming programs
- C. Increasing scope of project enterprises
- D. Project planning
 - 1. Strong points and weak points of present program
- E. Improvements and supplementary projects

Second Week

New Project Records

- A. Budgets
- B. Agreements
- C. Survey
- D. Map, colored to show soil types
- E. Legal description
- F. Financing new enterprises
- G. Farming outlook

Third Week

Soils

- A. Soil survey and soil map
- B. Soil formation and development
- C. Soil classification
 - 1. Soil series

2. Soil group
3. Soil class
4. Soil profile
5. Naming of soils

Fourth Week

Soils Continued

- A. Soil properties
- B. Organic matter and its effect on soil
- C. Important plant foods found in soil
- D. Testing of soil for plant food deficiencies
- E. Soil problems common in the community and their management

Fifth Week

Soils Continued

- A. Make soil profiles
 1. Field trip to recent, old valley filling, and residual soils
- B. Soil judging
- C. Rating of soils observed on field trip as to value and productivity

Sixth Week

Farm Buildings and Convenience

- A. Rafter cutting
- B. Parts of a building
- C. Building materials

D. Farm fencing**Seventh Week****Farm Shop Skills****A. Oxyacetylene cutting**

1. Principles of cutting
2. Equipment and techniques
3. Safety
4. Demonstration and practice cutting,
beveling, piercing holes

B. Close out old project book**C. Start record keeping in new project book****Eighth Week****Farm Shop Skills Continued****A. Electric arc welding**

1. Equipment and safety
2. Principles of welding
3. Common welded joints
4. Demonstration and practice running
beads in flat position

Ninth Week**Farm Shop Skills Continued****A. Electric welding in flat position**

1. Practice making butt, lap, fillet
welds
2. Vertical welding for advanced students

Tenth Week**Farm Shop Construction**

- A. Survey of home farm for possible shop jobs
- B. Selection and planning of five major shop projects
- C. Develop working drawings
- D. Develop list of materials and order supplies
- E. Make a budget for shop projects

Eleventh Week**Farm Shop Construction**

- A. Individual instruction as needed on students' projects

Twelfth Week**Farm Shop Construction**

- A. Individual instruction as needed on students' projects

Thirteenth Week**Farm Power and Machinery**

- A. Proper storage and winterizing of tractor and other farm machines
- B. Individual instruction as needed on students' shop projects

Fourteenth Week**Public Speaking and Farm Shop**

- A. Selection of topics
- B. Principles of organizing a speech
- C. Determining pulley and belt sizes

Fifteenth Week**Farm Power and Machinery**

- A. Proper hitching of the tractor and its implements
 - 1. Determining center of draft, center of cut, plow depth, etc.
- B. Adjust and repair plow
 - 1. Adjust coulter
 - 2. Adjust for land clearance
 - 3. Adjust for heel clearance
- C. Individual instruction as needed on students' shop projects

Sixteenth Week**Farm Shop Construction**

- A. Individual instruction as needed on students' shop projects

Seventeenth Week**Farm Power and Machinery**

- A. Repair disc
 - 1. Sharpen
 - 2. Replace bearings

3. Replace broken parts and paint
- B. Individual instruction as needed on students' shop projects

Eighteenth Week

Public Speaking

- A. Presentation of five minute speech
- B. Review for semester exam
- C. Semester exam

Nineteenth Week

Parliamentary Procedure

- A. Privileged motions
- B. Subsidiary motions
- C. Incidental motions
- D. Each student act as chairman for fifteen minutes

Twentieth Week

Farm Power and Machinery

- A. Fundamentals of the gasoline engine
 1. Name and functions of engine parts
 2. Types of engines
 3. Principles of four cycle engine
 4. Accessory systems, function of each

Twenty-first Week

Farm Power and Machinery Continued

- A. Engine construction

1. Removing and replacing oil pan
2. Removing and replacing cylinder head
3. Removing carbon from cylinder head and block

Twenty-second Week

Farm Power and Machinery Continued

A. Engine construction

1. Removing ridge from cylinder
2. Removing piston and connecting rod assemblies
3. Types of pistons and piston rings
4. Replacing piston rings, piston, and connecting rod assemblies

Twenty-third Week

Farm Power and Machinery

A. Engine construction

1. Measuring cylinders for out of round
2. Valves and valve mechanisms
3. Removing and inspecting valves
4. Lapping valves
5. Replacing valves

Twenty-fourth Week

Farm Power and Machinery

A. Ignition system

1. Construction and operation of storage batteries
2. Testing a battery
3. Servicing a battery
4. Battery charging
5. Construction of ignition coil
6. Construction and servicing spark plugs

Twenty-fifth Week

Reproduction and Inheritance

- A. Male reproductive organs
- B. Female reproductive organs
- C. Pregnancy and parturition

Twenty-sixth Week

Reproduction and Inheritance

- A. Systems of breeding
- B. Pedigrees
- C. Breeding management practices

Twenty-seventh Week

Farm Buildings and Conveniences

- A. Painting
 1. Inspecting buildings for paint failures
 2. Preparing surfaces for painting
 3. Painting metal surfaces
 4. Determining paint quality

5. Estimating quantity of paint needed for specific job
6. Storing and handling paints safely
7. Using paint spray outfit

Twenty-eighth Week

Farm Crops

- A. Growth and reproduction of plants
- B. Identification and farm practices involved in production of:
 1. Red clover
 2. Alsike clover
 3. Crimson clover
 4. Ladino clover
 5. Subterranean clover

Twenty-ninth Week

Farm Crops

- A. Identification and farm practices involved in production of the following legumes:
 1. Alfalfa
 2. Austrian field peas
 3. Hairy vetch
 4. Common vetch
 5. Lotus Major
 6. Lotus Corniculatus

Thirtieth Week**Farm Crops**

- A. Identification and farm practices involved in production of the following grasses:

1. Alta fescue
2. Chewings fescue
3. Creeping red fescue
4. Common ryegrass
5. English ryegrass
6. Kentucky bluegrass
7. Fall oat grass
8. Orchard grass

Thirty-first Week**Farm Crops**

- A. Identification and farm practices involved in production of the following grasses:

1. Timothy
2. Bentgrass
3. Reed Canary
4. Meadow Foxtail
5. Redtop

Thirty-second Week**Farm Crops**

- A. Hay making

1. Quality
2. Importance of leafiness
3. Methods of curing
4. Equipment used
5. Storage and handling

B. Silage

1. Factors affecting quality
2. Preservation
3. Silo capacities
4. Types of silos
5. Equipment used in harvesting

Thirty-third Week

Farm Crops

A. Weed control

1. Importance to the farmer
2. Ways weeds are spread
3. Weed control laws

B. Identification and control of the following weeds:

1. Canada thistle
2. Tansy ragwort
3. St. John's wort
4. Sheep sorrell
5. Chickweed
6. Wild carrot
7. Quack grass

8. Wild onion and garlic

Thirty-fourth Week

Farm Crops

- A. Culture of wheat, barley, oats,
and corn
- B. Harvesting problems with cereal
grains
- C. Drying corn
- D. Government support programs

Thirty-fifth Week

Summer Program

- A. Record keeping during summer months
- B. Summer project problems
- C. Fitting and showing livestock for the
fair

Thirty-sixth Week

Final Exam

- A. Review semester's work
- B. Semester exam
- C. Pay all bills and clear department

First Week

Project Records

- A. Bring project records up to date
- B. Long time farming programs
- C. Increasing scope of project enterprises
- D. Project planning
 - 1. Strong and weak points
- E. Improvement and supplementary projects

Second Week

New Project Records

- A. Budgets
- B. Agreements
- C. Survey
- D. Map, colored to show soil types
- E. Legal description
- F. Financing new enterprises
- G. Farming outlook

Third Week

Farm Surveying

- A. Soil water movement
- B. Benefits of drainage
- C. Relation of soil to drainage
- D. Determining method of drainage to use

Fourth Week**Farm Drainage**

- A. Care and use of farm level
- B. Surveying instruments
- C. Keeping surveying notes
- D. Practice running good lines

Fifth Week**Farm Drainage**

- A. Field practice running grade lines
 - 1. Determining elevation
 - 2. Determine height of instrument
 - 3. Determine front and back sites
 - 4. Determine cut
- B. Use profile map and chart information

Sixth Week**Farm Drainage**

- A. Parts of a drainage system
- B. Types of systems
- C. Points to consider in laying out a system
- D. Clay versus concrete tile
- E. Determining depth and frequency of tile

Seventh Week**Farm Drainage -- Project Records**

- A. Figuring cost of drainage system

- B. Field trip through tile factory
- C. Close out old project books
- D. Start new project books

Eighth Week

Horticulture

A. Pruning

1. Purpose of pruning
2. Effect upon growth and fruit setting
3. Effect upon size, color, and quality of fruit
4. Treating wounds
5. Methods of pruning

Ninth Week

Horticulture

A. Grafting

1. Selection and care of scions
2. Incompatability
3. Cleft graft
4. Whip graft
5. Budding
6. Waxes used on grafting

Tenth Week

Dairy Husbandry

- A. Feeding cows for production
- B. Feeding and managing the dairy and

and fresh cow

- C. Housing and equipment
- D. D.H.I.A.
- E. Dairy cattle diseases, their prevention and control

Eleventh Week

Dairy Husbandry

- A. Marketing dairy products
 - 1. Seasonal price trends
 - 2. Types of fluid milk markets
 - 3. Meeting Grade A requirements
 - 4. Cost of Grade A production

Twelfth Week

Electricity

- A. Introduction to common electrical terms
 - 1. Definitions
 - 2. Meter problems
 - 3. Determine wattage, voltage, amperage

Thirteenth Week

Electricity

- A. Identification of electrical units
- B. Wire sizes and types
- C. Splicing, solering, taping wire splices
- D. Make an extension cord

Fourteenth Week

Electricity

- A. Some skills in electric wiring
- B. Important rulings of National Electric Code

Fifteenth Week

Public Speaking

- A. Selection of topics
- B. Organization of materials

Sixteenth Week

Public Speaking

- A. Presentation of speeches

Seventeenth Week

Electricity Continued

- A. Electric wiring diagrams
- B. A-B-C's of wiring
- C. Single pole switches

Eighteenth Week

Electricity Continued

- A. The service entrance
- B. Four wiring systems
- C. Circuit protection

Nineteenth Week

Parliamentary Procedure

- A. Discussion of privilege, incidental, and subsidiary motions
- B. Discussion of topics to be used in parliamentary contest

- C. Each student conduct meeting for
fifteen minutes

81

Twentieth Week

Sheep Production

- A. Feeding and management of pregnant ewes
- B. Management at lambing time
- C. Shearing
- D. Fattening lambs

Twenty-first Week

Sheep Production

- A. Diseases, their prevention and control
- B. Types of markets
- C. Factors influencing market price
- D. Dressing percentage
- E. Marketing wool
 - 1. Grades
 - 2. Shrinkage
 - 3. Methods of marketing

Twenty-second Week

Motors

- A. Adjusting valve clearance
- B. Checking valve springs
- C. Type and construction of transmission

Twenty-third Week

Motors

- A. Construction and operation of differentials

- B. Disassembling and assembling differential
- C. Disassemble and assemble of universal joint

Twenty-fourth Week

Crop Production

- A. Improvement of plants through crop breeding
 - 1. Reasons for improving
 - 2. Methods of crop improvement
 - a. Selection
 - b. Hybridization
 - 3. Classes of seed

Twenty-fifth Week

Crop Production

- A. Plant diseases
 - 1. Root rots of wheat, oats, barley
 - 2. Rusts of wheat, oats, barley
 - 3. Smuts of wheat, oats, barley
 - 4. Nematode and blindseed disease of ryegrass and fescue
 - 5. Virus infections of clover and alfalfa

Twenty-sixth Week

Swine Marketing

- A. Seasonal price variations

- B. Weight to sell
- C. Market classes and grades of hogs
- D. Care in marketing hogs
- E. Field trip through packing house to observe processing and marketing swine carcasses

Twenty-seventh Week

Swine Breeding and Record Keeping

- A. Reproductive system of swine
- B. Systems of breeding
- C. Production records and litter certification
- D. Marking and registration

Twenty-eighth Week

Farm Shop

- A. Selection and design of farm shop project
 - 1. Itemized bill of materials
 - 2. Budget of costs
- B. Individual instruction on shop projects

Twenty-ninth Week

Farm Shop

- A. Individual instruction on shop projects

Thirtieth Week

Farm Shop

- A. Individual instruction on shop projects

Thirty-first Week**Farm Shop****A. Advanced oxygen and acetylene welding**

1. Aluminum welding
2. Hardsurfacing
3. Brazing

Thirty-second Week**Farm Machinery****A. Combine**

1. Principles of operation
2. Minor adjustments
3. Maintenance

B. Haying equipment

1. Review mower adjustments
2. Minor adjustments and operation of
baler

Thirty-third Week**Irrigation****A. Principles of irrigation**

1. Methods of applying water
2. Irrigation terms
3. Soil and its effect on irrigation
4. Water rights and laws

Thirty-fourth Week**Irrigation Continued****A. Determining G.P.M. of water required**

- B. Determine number of sprinklers
- C. Determine rate of application per set
- D. Determine main and lateral size
- E. Determine power requirements

Thirty-fifth Week

Irrigation Continued

- A. Field trip to design irrigation system
- B. Design system for above farm
- C. Determine cost of irrigation system

Thirty-sixth Week

Project Books

- A. Close out and bring up to date
- B. Summer planning
- C. Semester exam

AGRICULTURE IV

First Week

Project Records

- A. Bring project records up to date
- B. Long time farming programs
- C. Increasing scope of project enterprises
- D. Project planning
 - 1. Strong and weak points of present program
- E. Improvement and supplementary projects

Second Week

New Project Records

- A. Budgets
- B. Agreements
- C. Survey
- D. Map, colored to show soil types
- E. Legal description
- F. Financing new enterprises
- G. Farming outlook

Third Week

Laying Out Building Foundations

- A. Use of farm level
- B. Establishing lines and grades
- C. Leveling the building

- D. Practice exercises in laying out foundations

Fourth Week

Soil Fertility

- A. Essential plant growth elements
- B. The primary plant foods
- C. The secondary plant foods
- D. The true elements

Fifth Week

Nitrogen Fertilizers

- A. Fertilizer terms
- B. Inorganic nitrogen materials
- C. Natural organic nitrogen materials
- D. Synthetic organic nitrogen materials
- E. Comparing fertilizer materials and costs

Sixth Week

Phosphate Fertilizers -- Potash Fertilizers

- A. Phosphorus
 - 1. Soil phosphorus
 - 2. Importance to the crop
 - 3. Tying up in the soil
 - 4. Source of phosphate fertilizers
 - 5. Phosphorus tests
- B. Potash fertilizers
 - 1. Importance to the crop
 - 2. Sources of potash salts

Seventh Week**Closing Out Project Record Book**

- A. Financial summary
- B. F.F.A. record
- C. Start new project record book

Eighth Week**Soil Fertility**

- A. Trace elements
 - 1. Boron
 - 2. Zinc
 - 3. Copper
- B. Soil factors that affect response to fertilizer
- C. The economics of fertilizer use
- D. How to measure the fertility of soil

Ninth Week**Motors**

- A. Brakes
 - 1. Construction and operation of braking systems
 - 2. Minor brake adjustments
 - 3. Flushing, filling, bleeding of hydraulic brake systems
 - 4. Replacing brake linings

Tenth Week**Motors**

A. Clutches

1. Types and construction of clutches
2. Removal and replacement of clutches
3. Diagnosis of clutch troubles

Eleventh Week**Motors****A. Carburetors**

1. Theory and construction of carburetors
2. Removing, replacing and adjusting
3. Air cleaners and servicing

Twelfth Week**Farm Management****A. Farm management terms**

1. Size of business
2. Diversified versus specialized farming

B. Selection of farm enterprises**C. U.S. Census report for Oregon and Polk County****Thirteenth Week****Farm Management****A. Choosing and buying a farm**

1. Soil management factors
 - a. Fertility
 - b. Drainage

- c. Irrigation
- d. Reclamation
- 2. Crop management
 - a. Seed selection
 - b. Weed control
 - c. Crop rotation
 - d. Storage and marketing

Fourteenth Week

Farm Management

- A. Field trip to class farm for purpose of orientation
- B. Description of class farm, home, and equipment
- C. Field trip to Dallas for purpose of obtaining deed, taxes, map, information from county agent
- D. Strong and weak points of farm

Fifteenth Week

Farm Management

- A. Selection of enterprises for class farm
 - 1. Adapted enterprises
 - 2. Non-adapted enterprises

Sixteenth Week

Farm Management

- A. Livestock management factors
 - 1. Improving quality

2. Yields
3. Annual feed requirements
4. Labor efficiency
5. Marketing
- B. Machinery and equipment management
 1. Selecting and purchasing
 2. Investment per acre
 3. Storage facilities
 4. Financing
 5. Figuring depreciation

Seventeenth Week

Farm Management

- A. Farm income under revised plan
- B. Major farm improvements and cost
- C. Improving the farm layout
 1. Maps showing field arrangements
- D. Critical periods and emergencies

Eighteenth Week

Farm Credit

- A. Principles involved in the use of credit
- B. Types of farm credit available
- C. Sources of farm credit
- D. Figuring interest on loans
- E. Legal aspects of farm financing

Nineteenth Week**Parliamentary Procedure**

- A. Each member conduct business meeting
for fifteen minutes

Twentieth Week**Income Tax Returns**

- A. Income tax using the short form
- B. Income tax using the long form
- C. Farm income tax using the accrual
method

Twenty-first Week**Farm Shop**

- A. Survey of home farm for possible
shop jobs
- B. Planning and selection of five major
shop projects
- C. Developing working drawing of shop job
- D. Developing list of materials and
ordering supplies
- E. Making a budget for shop projects

Twenty-second Week**Farm Shop**

- A. Work on shop projects

Twenty-third Week**Farm Shop**

- A. Work on shop projects

Twenty-fourth Week**Farm Shop**

- A. Work on shop projects
- B. Portion of classwork on oxyacetylene welding

Twenty-fifth Week**Farm Shop**

- A. Work on shop projects
- B. Portion of classwork on oxyacetylene welding

Twenty-sixth Week**Horticulture**

- A. Strawberries
 - 1. Cultural practices
 - 2. Crop outlook
 - 3. Diseases and pests

Twenty-seventh Week**Horticulture**

- A. Trailing berries
 - 1. Cultural practices
 - 2. Crop outlook
 - 3. Diseases and pests

Twenty-eighth Week**Genetics**

- A. Sex and its inheritance
- B. Inheritance of quantitative characters

C. Types and causes of variation

D. Genetics in plant and animal breeding

Twenty-ninth Week

Exchange Classes With Home Economics

A. Boys in home economics learning
fundamentals of cooking

B. Girls in shop learning fundamentals
of simple home repairs

Thirtieth Week

Exchange Classes With Home Economics

A. Boys and girls as partners, plan
menu, shop for groceries, cook, and
serve full course dinner

B. Fundamentals of family living
1. Develop itemized budget for young
married couple for one year
2. Manners and dress

Thirty-first Week

Entomology

- A. Insect losses
- B. Insect benefits
- C. The development of insects
- D. Internal and external structure of some
of most troublesome insects

Thirty-second Week

Entomology

A. Chemical control of insects

1. Stomach poisons
2. Contact insecticides
3. Fumigation
4. Sprays and dusts

B. Control measures for

1. Japanese beetle
2. Wire worms
3. Weevils

Thirty-third Week**Entomology****A. Control measures for**

1. Tent caterpillar
2. Hessian fly
3. Bot fly
4. Grubs
5. Cherry fruit fly
6. Sheep tick

Thirty-fourth Week**Motors****A. Motor tuneup**

1. Engine turns over but does not start
2. Engine runs but misses
3. Engine lacks power
4. Engine overheats

Thirty-fifth Week**Motors**

- A. Engine compression testing
- B. Trouble shooting ignition system

Thirty-sixth Week**Project Books**

- A. Close out project books
- B. Summer planning
- C. Semester exam

CHAPTER IV

SUMMARY AND RECOMMENDATIONS

SUMMARY

This study was designed for the purpose of developing a four year course of study for vocational agriculture at Central High School by means of an advisory council. This problem of developing a course of study is basic to all departments of vocational agriculture. However, the means by which this can be accomplished is still open to investigation. This paper deals primarily with a method of developing a course of study by the use of community resource people.

A four year course of study for vocational agriculture must be based upon the farming carried on in the community. The reasons for this are quite obvious to the profession. The community becomes a vast laboratory where students can develop skills, abilities, and attitudes essential for developing proficiency in farming. Such a program provides learning activities in all phases of production, management, research, and marketing of agricultural commodities. Furthermore, a program built upon local community interests and needs contributes to the improvement of agriculture and rural living and can be readily understood by the rural people who are affected by the program.

The responsibility for developing a course of study lies primarily with the vocational agriculture instructor. His task is further complicated by the rapid technological advances being made in agriculture. No one individual should try to undertake the responsibility for developing a course of study for a school and community. Resources are available in every community for this purpose. The vocational agriculture instructor needs to recognize that an advisory council, made up of reputable farmers and business people of the community, can be of great assistance in planning a community program of vocational agriculture. The ultimate success of this approach is dependent upon the careful selection and proper utilization of the advisory council.

Supervised farming, farm mechanics, and FFA as taught in the classroom and on the farm or as extra curricular activities are integrated into a four year program of vocational agriculture. The supervised farming program provides first hand knowledge of farming as it is conducted in the community. It is an opportunity for the boy to learn first hand by doing. Farm mechanics serves to develop many mechanical abilities of the boy which are necessary to cope with the ever increasing mechanical problems of the farm. The FFA, a powerful motivating force, develops leadership, initiative, and interest in farm activities

that will lead to better and more useful citizens through self government.

The democratic approach to program planning is preferred and recommended. A course of study developed by this approach should result in a more functional program which will be more in keeping with the needs of the school and community. Guides and procedures for organizing an advisory council have already been established and are available to the vocational agriculture teacher. These procedures are to be found in Appendix A of this study. The problem thus becomes one of recognizing an advisory council as an educational tool in program planning. Vocational agriculture can only be as effective as the teacher who employs the latest methods in up-dating his instructional program.

RECOMMENDATIONS

In light of this study and findings, the following recommendations are made:

1. That every department of vocational agriculture develop its own course of study around its school and community needs.
2. That an advisory council provides an ideal way by which a course of study appropriate for the school and community can be developed.
3. That an advisory council must serve only in an

advisory capacity to the local board of education.

4. That the board of education and the local agriculture instructor recommend the appointment of members to the advisory council. The membership to be composed of successful farmers and businessmen with a practical farming background and who have the respect and confidence of the patrons of the community.
5. That a satisfactory program of FFA activities must be integrated into a well organized course of study. Such a program must provide specific opportunities for developing leadership and citizenship in boys.
6. That since the scope and methods of education must always change to fit the needs of a changing world, a course of study cannot be considered a final matter. Rather, it is a study of conditions as they now exist and one of an immediate nature. The advisory council, therefore, should continue to evaluate the program at regular intervals.
7. That this procedure in the use of an advisory council is recommended as a means of developing professional growth and satisfaction in teaching.
8. That additional study be given to methods of organizing a course of study. Many problems are still unsolved. Any future studies should give attention

to developing a more systematic way of directing the evaluative activities of the council. Other areas which should be stressed are:

- a. Development of more complete evaluative criteria.
 - b. Selection and training of council members.
 - c. Integration of studies and activities over the four year program.
9. That this paper, though not complete, be used as a guide for establishing the joint responsibility of the vocational agriculture teacher and the local board of education for developing a course of study that is appropriate for that school and community.
10. That this paper may serve in some capacity in improving the educational program in vocational agriculture.

CONCLUSIONS

This study has shown that an advisory council, carefully selected and properly organized, can bring about improvements in a vocational agriculture program. Recommendations were made by the council which resulted in:

1. Improvement in shop facilities.
2. The purchase of additional tools for instructional purposes.
3. An expanded offering in farm mechanics instruction.

4. Increased course offerings in areas of major importance to the community.
5. Elimination of some and reduction of time allotted to other course offerings of minor importance to the community.
6. A close bond between the advisory council, instructor, and school officials as planning was conducted and carried out.

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APPENDICES

By-Laws of Central Vocational Agriculture
Advisory Council

PREAMBLE

We, a group of citizens of School District 13 C, have come together as a group in order to help plan, conduct and evaluate a school-community program of vocational agriculture.

ARTICLE I - Name

The name of this organization shall be: The Central High School Vocational Agriculture Advisory Council.

ARTICLE II - Purposes

Section 1. To provide for a continued program of vocational agriculture when teachers change.

Section 2. To provide a community voice in the planning and development of the vocational agriculture program.

Section 3. To assist in keeping the vocational agriculture program and department up to date.

Section 4. To assist in adjusting the vocational agriculture program to emergencies and gradual changes.

Section 5. To help correlate the work of the department with other local, county, state and national agencies.

Section 6. To assist the vocational agriculture teacher, school administrator, and board of education in helping formulate policy for the vocational agriculture department.

Section 7. To serve as an avenue of communication between the local vocational agriculture department and the community.

Section 8. To serve as a nucleus for sponsoring young farmer and adult farmer classes.

Section 9. To assist the vocational agriculture teacher in setting up his work load.

Section 10. To help establish the objectives of the vocational agriculture department.

Section 11. To estimate or measure annually the progress made toward accepted objectives.

ARTICLE III - Membership

Section 1. This advisory council shall consist of nine (9) members.

Section 2. The membership shall be selected from a cross section of citizens of school district 13 C, who are interested in agriculture in the community. Faculty members of Central High School shall be excluded from membership on the council.

Section 3. An individual will automatically lose

membership in the council if he fails to attend three (3) consecutive meetings without presenting good reason in advance to either the chairman or secretary of the council.

Section 4. A term of membership shall be three (3) years -- beginning at the first stated meeting in October.

Section 5. Resigned vacancies in membership will be filled by a majority vote of those council members present. The appointment will be good for the expired term of the member creating the vacancy.

Section 6. A council member may not serve continuously for more than three (3) years, except that he may be appointed for a full term after serving the unexpired term of a member who has resigned from the council.

Section 7. After a lapse of one (1) year, a citizen who has served a full term as a council member, may again be elected to the council.

ARTICLE IV - Officers and their duties

Section 1. Officers of the council shall be: (1) chairman, (2) vice-chairman, (3) secretary.

Section 2. The officers will be nominated from the floor.

Section 3. The vocational agriculture instructor may serve as a non voting secretary.

Section 4. Officers will be elected by secret ballot

at the regularly scheduled meeting in October of each year.

Section 5. Officers will serve a term of one (1) year.

Section 6. Any vacancy in the officers positions will be filled by nomination and election from the floor at the next regular meeting after the vacancy occurs.

Section 7. The duties of the officers are as follows:

A. Chairman

1. Preside over and conduct meetings according to accepted parliamentary procedure (Roberts Rules of Order).
2. Call special meetings.
3. Keep members on the subject and within time limits.
4. Appoint committees and serve as ex-officio member of these.
5. Represent the council and speak on occasions.
6. Coordinate council efforts.
7. Follow up council activities and check on progress being made.
8. Keep council work moving in a satisfactory manner.

B. Vice Chairman

1. Assist the chairman.
2. Have charge of committee work in general.

3. Preside over meetings in absence of the chairman.
4. Be prepared to take over the duties and responsibilities of the chairman.

C. Secretary

1. Prepare and read minutes of the meetings.
2. Have available for the president the list of business for each meeting.
3. Attend to official correspondence.
4. Send out and post notices.
5. Count and record a rising vote when taken.
6. Prepare council reports.
7. Keep the permanent reports of the council.
8. Read communications at meetings.
9. Have on hand for each meeting the following:
 - a. Secretary's book and minutes of the last meeting.
 - b. List of committees and committee reports.
 - c. Copies of the constitution and by-laws.

ARTICLE V - Meetings

Section 1. The place of the regular meeting will be the vocational agriculture classroom of Central High School.

Section 2. A quorum shall consist of the majority of the members of the council.

Section 3. Regular meetings shall be held on the second thursday of alternate months at 8:00 p.m.

Section 4. Special meeting may be called by the chairman upon three (3) days notice to each council member.

Section 5. All meetings of the council will be open to the public.

ARTICLE VI - Rules for Council Members

Section 1. The council shall function in an ADVISORY capacity only.

Section 2. The council shall work only within the field of vocational agriculture, and with the school personnel designated by the board of education or its responsible agents.

Section 3. Only the committee as a whole may officially advise school officials.

Section 4. The council shall not release publicity regarding its deliberations without approval of the board of education or its agents.

Section 5. The advisory council shall not, at any time, engage in public controversy with the board of education or school personnel.

Section 6. Members should refuse to participate in

unrepresentative citizen's committee.

Section 7. In accepting membership, a member of a citizen's committee has agreed to attend meetings regularly and take part in group studies and deliberations for the improvement of agricultural education in the school and community.

Section 8. Each member of the council shall maintain contacts with as many other citizens as possible, securing from them their suggestions for the schools, and discussing with them the issues that are before the advisory group.

Section 9. The public shall be informed as to who are currently serving on the advisory council.

Section 10. The recommendations of the advisory council to the board of education may be made available to the public by mutual consent of the board and the advisory council.

ARTICLE VII - Committees

Section 1. Committees shall be appointed by the council chairman as a result of action by the floor.

ARTICLE VIII - Review of By-Laws

Section 1. By-laws of the council shall be read by the council secretary during the first regular meeting in October of each year.

ARTICLE IX - Amendments

Section 1. Amendments of changes in the by-laws of the council will be proposed by motion and majority vote at a regular meeting.

Section 2. A copy of the proposed change of amendment, in the by-laws, shall be sent to each council member in writing by the secretary prior to the next meeting. The proposed change or amendment will then be voted on and passes by not less than 2/3 vote of those members present.