

VOCATIONAL AGRICULTURE TEACHER PERCEPTIONS
OF COMPETENCIES AS BASES FOR PRE- AND
IN-SERVICE AGRICULTURAL EDUCATION
PROGRAMS IN OKLAHOMA

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CHAPTER I

INTRODUCTION

The kinds and degrees of competencies needed by teachers of vocational agriculture have increased tremendously during the past two decades. This is due largely to the increased complexity of our society, mechanization, and advancements in technology involved in the production of agricultural commodities. Furthermore, the vocational agriculture program today encompasses increasingly more varied and larger groups of persons having need of and/or wanting instruction in the area. This fact was illustrated dramatically recently in "Between Issues" (1, p.2) with the disclosure of the following instructional program enrollment information from the United States Office of Education.

<u>Program Level</u>	<u>1974 Voca. Agric. Enrollment</u>
1. Secondary School	
A. Production Agriculture Programs	328,713
B. Agribusiness Programs	330,603
TOTAL (A & B)	659,316
2. Post Secondary	47,458
3. Adult	<u>269,281</u>
TOTAL (1 + 2 + 3)	976,319

From these groups also came a total of 465,180 FFA members who sought leadership development by participating in various competitive events and programs of recognition associated primarily with secondary programs of vocational agriculture.

It is obvious then that the 14,943 vocational agriculture teachers employed in 1974 (1, p. 2) were charged with the great responsibilities of motivating for and providing occupational education in agriculture to almost one million people, the great majority of whom were at the particularly challenging secondary school level. In addition, they were assigned the tasks of providing pre-employment training or skills updating for post-secondary program enrollees and for young and/or adult class members. At the same time, they were striving to cultivate the leadership potential of almost one-half million FFA members.

Equipping vocational agriculture teachers with the kinds and degrees of competencies required to fulfill the aforementioned responsibilities is a tremendous challenge to and determinant of direction for a total program of teacher education. Pre-service training prepares the vocational agriculture teacher to make a good beginning, but the new teacher, once established in a job, will proceed through a period of "trial and error" until he gains these practical experiences which will allow him to become an effective teacher. A well-planned in-service program can serve to shorten this period of "trial and error" learning so the mistakes teachers make will be minimal and they will mature rapidly and become effective teachers of vocational agriculture in the shortest possible time. Thus, teacher education must through the pre-service program, equip the teacher to secure a job and accept a responsibility for providing continuous, effective in-service programs for further developing the teacher's competency while employed.

An urgent need within programs of education for teachers of vocational agriculture is to prepare them for dealing with their target audience. These teachers are employed to teach high school boys and

girls, young farmers, and adult farmers. Each teacher spends much of his time teaching and supervising young people in a variety of instructional and leadership activities. Therefore, additional training should be offered to fit teachers for all the jobs they have to do, especially to fit them with those competencies needed for the full development of young boys and girls in grades 9 through 12 and in the age groups of 14 to 21 years.

It is imperative that teachers of vocational agriculture possess competencies needed to motivate students. Super (2) states that:

High school years are essentially years of vocational exploration rather than of preparation for an occupation. They are years in which young people learn much about the world of work and about fitting into it, but in which most youth do not, in fact, choose a life work. They do well if they succeed in laying the foundation for a sound choice by learning about occupations and about the implication of their own abilities and interests for the series of choices with which they are confronted as they go through school and enter the labor force (pp. 121-122).

Thus, it would be beneficial if teacher training programs were designed to aid teachers to work with the Exploration Stage Group (ages 15 - 24) where self-examination, role tryouts, and occupational exploration take place in school, leisure activities, and part-time work.

Super (2) stated that:

Interest, values, needs, traits, and self concepts can each be considered as personality constructs, as elements in theories of vocational development, and as concepts with relationship to occupation (p. 108).

The vocational agriculture teacher is challenged by this age group to motivate them and to provide high quality instruction and training so vital to their growth and development.

Young and adult farmer education is an integral part of the vocational agriculture program. Vocational agriculture teachers need to

keep up-to-date with the latest technical information and methods of teaching to be effective with this group.

Teachers, teacher educators, and supervisors are realizing more and more the need for on-the-job training for teachers of agriculture. Each group is concerned with the need for a program designed for change--one that can keep pace with development in the technology in agriculture and at the same time help agriculture keep pace with the changes on the social scene. In the process, however, that which has been good must not be discarded. There is a need to develop the ability to recognize when something is obsolete, and then have the courage to drop it or redirect it toward new objectives.

State supervisory departments and university departments of agricultural education must cooperatively maintain programs of workshops, short courses, small group seminars, institutes, individual consultation, and university credit courses designed to develop and maintain teacher skills and competencies.

Statement of the Problem

In order to be of most assistance to teachers in the state, it was felt that the state supervisory staff for vocational agriculture in Oklahoma and the staff members of the Agricultural Education Department of Oklahoma State University needed to know what the pre- and in-service training needs were for vocational agriculture teachers in Oklahoma. It was felt that recent and rapid changes in agricultural production, processing, sales, marketing, and distribution, coupled with changes in schools and students, had created the need for vocational agriculture teachers to develop, re-direct, and/or update their competencies and to

change and/or reorder their priorities of needs for pre- and in-service training. An in-depth study among the state's vocational agriculture teachers to obtain self-assessments of competency levels needed and possessed and to secure preferences and priorities for future teacher education efforts were felt to be prime needs.

Purpose of the Study

The primary purpose of this study was to establish how Oklahoma vocational agriculture teachers perceived their degrees of competence within selected areas of their program; when, where, and by whom these competencies should be developed; and the priority of each for teacher training programs in the future.

Objectives of the Study

In order to accomplish the purpose of the study, the following specific objectives were formulated:

1. To determine the degree of competence vocational agriculture teachers felt they possessed in the areas of:
 - a. Organization and management of vocational agriculture departments.
 - b. Vocational agriculture supervised project program.
 - c. FFA Chapter advisement.
 - d. FFA fairs, shows, and contests.
 - e. Vocational agriculture occupational training.
 - f. Conducting young farmer and/or adult program.
 - g. Making use of local advisory committee.
 - h. Agricultural economics.

1. Agronomy and/or plant science.
 - j. Animal science.
 - k. Mechanized agriculture.
2. To determine the priority of competency as assigned by the teachers.
 3. To determine when the training should be provided within the program as perceived by the teachers.
 4. To determine the instructors the teachers would prefer to conduct the training offered.
 5. To determine where training programs should be held.
 6. To determine if the teachers felt a need for a first year in-service training program for new vocational agriculture teachers.
 7. To determine the type of training sessions to be offered at summer conference.

Rationale for the Study

In setting up teacher education programs, several questions must be raised. How to determine what to teach? Who determines what is taught? How should it be taught? Is it relevant? Should the same curriculum be taught to all teachers? No one group should determine answers to these questions. Rather, the agriculture supervisor, the agricultural education teacher educators, the technical agriculture faculty member, the local vocational agriculture teacher, farmer, and agriculture related industry representative must all be a part of the process.

However, the joint staffs of teacher education and state supervisory staff in vocational agriculture are seeking ways to include meaningful in-service training in the special interest groups at the annual summer

conference and for improved training programs. Studies are planned to determine if a first year program is feasible for the new teacher of vocational agriculture. To best accomplish these tasks, it is essential to secure inputs from teachers in the field as to their needs for maximum effectiveness in their teaching efforts.

The investigator became interested in in-service training after a successful program for teachers in the Southwest District was completed in 1973. The 78 teachers who participated in the training program accepted the training with such enthusiasm that the investigator was convinced a thorough study should be conducted on in-service training.

Assumptions and Limitations of the Study

For the purpose of this study, the following assumptions were accepted:

1. Agriculture teachers in the profession could and would indicate their perceptions of the quality of the training they have received and that which they need.
2. In-service teachers possess a variety of teaching experiences and backgrounds in certain competency areas and are qualified to help determine which areas should receive priority of scheduling for training.
3. In-service teachers are the best qualified to offer recommendations for in-service training programs because of their teaching experience.
4. The questionnaire developed with the assistance of the joint staff of teacher education and state supervisory staff in vocational agriculture would adequately measure the effectiveness of the 11 competency areas for pre- and in-service training programs for agricultural

education in Oklahoma.

5. Attitudes expressed by the vocational agriculture teachers were honest expressions of their perceptions of pre- and in-service education needs.

6. Data obtained from vocational agriculture teachers could be utilized by the joint staff of teacher education and state supervisory staff in vocational agriculture to seek additional help from the Oklahoma State University faculty, especially course offerings in technical agriculture training, obtain specialist help, and utilize vocational agriculture teachers with expertise to offer additional competency based pre- and in-service agricultural education training.

Definition of Terms

Certain terms have special meaning as applied to this study. The following definitions seemed pertinent and relative.

1. In-Service Teacher Education: Refers to learning experiences that will improve the performance of the teacher in instruction-related ways. This involves workshops, consultations, field trips, and training sessions as well as formal education.

2. Pre-Service Teacher Education: Refers to the curriculum requirements that prospective vocational agriculture teachers must have satisfactorily completed before they were certified to teach.

3. Competencies: The skill ability and the degree of specialization the teacher has for performing the major responsibilities associated with his job.

4. Vocational Agriculture: Refers to a course taught in high schools designed to train present and prospective employees for careers

in agriculture.

5. Supervised Occupational Experience: The individual student application of knowledge and skill acquired through the instructional component put to practical use outside the classroom under the supervision of the agriculture teacher.

6. FFA Activities: Require a combination of classroom instruction, laboratory activities, and the supervised occupational experience programs.

7. Advisors: Refer to the vocational agriculture teachers that advise the FFA chapters.

8. Professional Education: Courses and activities designed to develop competencies in understanding people, instructional methods, and instructional materials and student teaching. It also includes courses in agricultural education, educational psychology, and technical education.

9. Technical Agriculture: Courses and activities designed to develop competencies in agriculture areas and the related sciences. It also includes courses in agricultural economics, plant science, animal science, mechanized agriculture, and science.

10. VAOT - Vocational Agriculture Occupational Training: Refers to conducting learning experiences in career selection, selection of training centers, student placement, and human relations.

11. Organized Young-Adult Farmer Program: Is an educational program organized on a group basis for the purpose of providing agricultural instruction for adult farmers and young farmers.

12. Advisory Committee: A valuable realistic, home-based source of assistance on matters of community concern.

13. Agricultural Economics: Refers to courses of instruction in farm management, farm credit, marketing, price trends and cycles, income taxes, and insurance.

14. Agronomy and/or Plant Science: Refers to courses of instruction in plant and seed identification, fertilization, soils, plant growth, reproduction, legal land description, landscaping, and greenhouse operation.

15. Animal Sciences: Refers to courses of instruction in livestock selection, care and breeding, feeds and feeding, and artificial insemination.

16. Mechanized Agriculture: Refers to courses of instruction in electricity, plumbing, small gas engines, arc and gas welding, farm level, blueprint reading, farm machinery repair, and farm building.

17. New Teacher Program: All teachers trained in vocational agriculture who have not taught previously or who have been away from the teaching field for a period of three years or more.

CHAPTER II

REVIEW OF LITERATURE

The purpose of this chapter is to present background information for this investigation. Involved were research studies, books, newsletters, professional magazines, and periodicals pertinent to this study. The review of literature has been organized into three different sections. These are as follows:

1. The need for in-service training.
2. Who is responsible for in-service training.
3. Changes in in-service education.

The Need for In-Service Training

The vocational agriculture departments in Oklahoma have employed 146 certified vocational agriculture teachers since 1970 who have five years or less teaching experience. This information was gathered from the State Vocational Agriculture Department files. This places a heavy burden of responsibility upon the agricultural education department to supply additional training for so many teachers who need in-service training.

In discussing vocational agriculture in the years ahead, Scarborough (3) presented the following statement to the Southern Regional Conference, Williamsburg, Virginia, March, 1975:

There must be a continuing education program by each teacher. Again, as in the case of student and teacher, we do not need to see pre-service and in-service as discrete, separate areas of professional development, but rather a

continuum. Neither can we see in-service education as a matter of choice. It is a must for every individual in every profession. It is a question of how best to help the teacher plan and develop his own individual program (p. 7).

Harris (4) stated that in-service education is essential to the change process in nearly all instances. However, its unique place in the improvement of instruction derives from the uniquely human character of the teaching-learning process. In-service education is the task that specifically seeks to improve instruction by changing the performance of people. In-service education should be for all agricultural education personnel, not just the teacher.

Teachers, teacher educators, and supervisors are realizing more and more the need for on-the-job training for teachers of agriculture. This is necessary because, as Phipps (5) pointed out:

1. It is impossible under present college standards for adequate training to be given in a four year college course to fit teachers for all jobs they have to do.
2. Teachers are often most cognizant of the need for training after they get on the job.
3. Teachers need to keep up-to-date with the latest technical information and methods of teaching (pp. 41-42).

In discussing agricultural education for a changing rural America, Tenney (6), in an article appearing in the March, 1962, issue of American Vocational Journal stated:

A carefully planned teacher education program must be provided for those who are preparing to become instructors and more in-service training must be provided for teachers so that they must be kept up to date with the new developments. This is an area that must be continually studied and adapted to meet the changing needs (p. 13).

Holcomb (7) stated in the Agricultural Education Magazine that:

To keep pace with our trigger-happy agricultural change, more and more in-service education is needed by teachers. The opinion of Texas vocational agriculture leaders favor

placing emphasis on the new or improved in technical agriculture, but strong opinion also favored expanding in-service education in methods and presentations (p. 179).

Zurbrick and McCormick (8) of the University of Arizona explain:

In-service education for teachers of agriculture takes many forms, and, in many instances, can be described as extremely flexible and widely diversified. This flexibility and variability in in-service education programs allows for wide extremes in subject matter, in duration, in location, and in objectives. The primary intent of the new teacher program is concerned with helping the beginning teacher adjust to a new job and assisting him to minimize the common pitfalls and difficulties encountered by many new teachers. Particular attention is paid to helping these teachers improve their planning ability in an attempt to strengthen the overall instructional program and teaching methods (p. 78).

Todd (9) at the University of Tennessee stated it is impossible for teachers of vocational agriculture to receive all of the training they need during a baccalaureate program. This condition is made more complex with rapidly changing occupations in agriculture and federal legislation to implement programs to keep training abreast with changes and trends. In-service education programs for vocational agriculture teachers have become accepted as a means for trying to keep the teachers up-to-date in changes that have occurred in their subject areas.

Oklahoma has employed 132 newly certified teachers of vocational agriculture, all graduates of the Agricultural Education Department of Oklahoma State University during the last three years. This trend has also been manifested in many other states, even to the point that rather comprehensive, specialized programs of in-service education for first year teachers have been initiated. An example of these would be a program used in Ohio. Some guiding principles of the new and returning teacher program of Ohio are listed below (10):

1. The over-all objective of the new and returning teacher program for the improvement of instruction through the

professional improvement of teachers.

2. The program should be comprehensive in nature, including activities representative of a complete program of agricultural education.
3. The program should include activities on a continuing, periodic basis.
4. The program should result from cooperative planning encompassing all persons concerned with the program.
5. The program should provide for meeting the individual needs of each teacher and his department.
6. The program should provide for continuous evaluation of the progress of each local program and each teacher.
7. The program should provide a sound basis for the continuing professional improvement of the teacher (p. 7).

Who Is Responsible for In-Service Training

In-service training, to be effective, should involve the teacher, the teacher educators, and the state supervisor. Dillon (11) pointed out:

Who is the lead man for in-service education? It is the agriculture teacher who asks himself, 'What in-service need do I have?' and then communicates personally and through the channels set up in his state, to state staff and to teacher educators; it is also the teacher educator, who systematically surveys the teacher clientele in order to plan the type program to best satisfy the teacher's need; it is the state staff, who not only help the teacher solve the problems in the local setting, but also communicates the teacher's felt needs to teacher educators for conversion into in-service activities (p. 75).

In order to clarify any misunderstanding and establish who is responsible for providing in-service training for vocational agriculture teachers in Oklahoma, the following information is copied from the Operations and Procedures Manual (12):

Teacher Education in Agriculture in Oklahoma

Purpose: Teacher training programs (pre-service and in-service, professional, and subject matter) will be developed for personnel employed or preparing for employment in professional vocational agriculture education positions such as teachers, coordinators, supervisors, directors, administrators, and counselors.

Teacher training programs shall prepare persons for work in approved programs of vocational agriculture in local public schools, area vocational schools, and other public educational agencies and institutions, thus enabling such persons to give effective instruction, training, and retraining to eligible students (preparatory, pre-employment, supplemental, and continuation) in all-day, evening, part-time, and special schools and/or classes.

Training Institutions: The teacher training program in vocational agriculture education will be operated at the Land-Grant Institution, Oklahoma State University.

Graduate Programs and Continuing In-Service Education: At Oklahoma State University up to 16 hours of course work may be completed in designated graduate study centers, while 8 of these 16 hours may be transferred from another institution.

In addition to formal course work, the State Department and the University Department of Agricultural Education will cooperatively maintain a non-credit program of workshops, short courses, and institutes designed to develop and maintain teacher skills and competencies. Special instructors may be employed to teach and direct such in-service educational activities (p. 36).

The Oklahoma Vocational Agriculture Operations and Procedures Manual

(12) specifically puts the burden of responsibility upon the agricultural education teacher training staff members. They are working very closely with the state staff of vocational agriculture to implement a complete and total in-service training program which will fit the total needs of all vocational agriculture teachers.

The vocational agriculture teacher has a unique position in that he works with agriculture supervisors, agricultural education teacher educators, school administrators, farmers, and agriculture related industry.

This enables the teachers to supply invaluable data to questions such as when to teach, who should teach, where to teach, and by what priority the competencies should be taught.

Teachers of vocational agriculture hold a professional obligation: they must take advantage of the opportunities that are made available by the joint staff of teacher education and state supervisory staff in vocational agriculture and local school administrators for professional improvement.

Changes in In-Service Education

All of the changes that have developed in the agricultural industry have not changed the basic fundamentals a teacher needs to become a successful agriculture teacher. But it has increased the number of competencies the teacher must learn and the mastering of the skills associated with those competencies, even those that seem very elementary.

Teacher education programs should continue to put major emphasis on preparing teachers for the basic secondary level program. But the in-service component will become increasingly important. It just seems unrealistic to expect teachers to be capable of doing so many different kinds of jobs for so many different occupations without many opportunities for their own skill improvement. That means more off-campus programs in both professional and technical areas.

Clark (13) stated that

It is clear that teachers of Vocational Agriculture for the future need different training than is being provided for teachers now being trained. New technology has brought about the need for teachers to acquire new understanding and skill. New developments in farming and agricultural business and new teaching methods and materials will require constant modification of teacher education programs in terms of technical

subject matter content and teaching techniques. It is equally apparent that new developments in our knowledge of learning, of teaching methods and of other aspects of professional understanding and abilities will require constant modification of the program for the professional education of teachers. In this connection, it is well to keep in mind that the competency of the teacher is more important than the number of courses or credit hours accumulated on a transcript or the amount of occupational experience the teacher has had. A long-time aim of teacher educators should be to move away from present methods of certifying teachers and move toward:

1. A carefully developed list of competencies needed by the teacher.
2. A carefully developed set of criteria for measuring the competence of the teacher or prospective teacher in terms of his performance.
3. Certification on the basis of demonstrated performance and on recommendations of the training institutions (p. 16).

Change appears to be an inevitable phenomenon for educators preparing vocational agriculture teachers. The direction of this change appears to be somewhat less certain. The Vocational Education Act of 1963 as amended in 1968 states (14):

It is not possible to provide at this point a prescription with specific directions to either approach or to solve immediate problems of the teacher educator. This is a problem of national concern requiring massive effort at the Federal level (p. 12).

Peterson (15) implies the critical issue facing teacher educators in agriculture is preparing teachers who understand the complexities of today's agriculture as well as the diversity of interest, motivation, and ability of today's student.

Vocational agriculture teachers spend much of their time teaching and supervising 659,316 boys and girls enrolled in vocational agriculture. Consequently, special emphasis should be included for in-service training programs designed primarily to train teachers to work with the

Exploration Stage Group (ages 15 - 24) where self-examination, role try-outs, and occupational exploration take place in school, leisure activities, and part-time work. Super (2) stated that interest, values, traits, and self concepts can each be considered as personality constructs, as elements in theories of vocational development, and as concepts with relationship to occupations. In-service training programs which teach competencies that young people can relate to and those that motivate students to become involved in the learning process are invaluable.

Tuttle (16) stated that the problems in education are further complicated by the fact that in recent years educators, in general, have stubbornly ignored the contributions of those disciplines that relate to the daily needs of boys and girls. The educator holds the key position to disseminate knowledge both in kind and amount. Tuttle felt that undoubtedly it was the dilemma of the "kind and amount" of education that prompted C. P. Snow to present his epic lecture in 1963 on the two cultures--exemplified by humanists and the physical scientists. To Snow, the humanist at one pole and physical scientist at the other, represented the extremes to which education has gone in our modern society. Snow developed the thesis that the dichotomy has grown so great that these two groups are working at what seems to be cross purposes which is dangerous, perhaps fatal, for civilization.

Tuttle (16) continued by pointing out that it is not a mere dilemma of how to educate, but what to educate for. It is more of a dilemma of the means by which public education can meet the needs not only of all boys and girls but also of all the people so as to assure them a productive yet rewarding part in our present day society. It is the "whole" individual of Dewey and the "education for life" of Prosser that concerns

Snow and others like him. Precisely stated, the problem is to make education relevant to the needs of boys and girls. And, by chance, if one should think this is not the problem, the test is obvious--just ask youth itself.

As to some changes predicted for the future, Thompson, University of California, (16) stated:

The traditional pattern for the preparation of teachers of agriculture which, for many years, was somewhat standard across the United States is now in transition in most states. There has been a general relaxing of previous rigid requirements of a specified undergraduate course preparation. Now in most states, practically any major in agriculture can qualify to teach agriculture with little additional course work. There has been a gradual increase in general education requirements for teachers with a resulting decrease in technical course requirements. Yet much more change must be made to meet the new demands which will be placed upon the teachers of agriculture in the next decade. Some of these are as follows:

1. The traditional requirement of competency in farming will not be adequate. The teacher must be competent in the occupation for which he is providing preparation. Work experience programs must be an integral part of teacher preparation and in-service programs for teachers.
2. Special preparation including appropriate work experiences must be provided the teacher who will work with students having special needs such as the disadvantaged and the retarded.
3. Experience with new strategies of teaching must be provided. These include sensitivity training, interaction analysis, reality theory, inquiry training, transaction analysis, achievement motivation, learning activity packages, and a host of others.
4. More realistic supervised teaching experience must be provided, and this experience must be individualized. For example, all student teachers may not need to spend the same length of time in the student teaching center. Some may need only a few days, while others may need a year-long internship.
5. The teacher must be prepared to teach both youth and adults and to provide short, intensive courses in occupational preparation, as well as the long term career type of vocational education.

6. Teacher candidates must be prepared to look objectively at all the issues in education and in society. This includes an analysis of both management and the workers biases, community power structure and pressing social issues.
7. Teacher candidates must be conditioned to change and be brought to realize that they too will need retraining periodically. By 1980, college degrees may be valid for a designated number of years with required course work for renewal (pp. 72-73).

Summary

Much has been written and spoken regarding agricultural education in-service training for the United States. The literature related to the problem under study was carefully selected and critically analyzed in an effort to give insight into present in-service programs in vocational agriculture and find some clues to future needs that will benefit vocational agriculture teachers. Three areas reviewed for the study were to confirm the need for in-service training, establish who is responsible for in-service training and analyze some different attitudes suggesting changes relevant to present and future problems confronting agricultural education in-service training programs.

A suggestion that in-service education is perhaps the most important of all the tasks confirms there is an urgent need for in-service education. That pre-service and in-service training should not be discrete, separate areas of professional development, but rather a continuum is clear. In-service training is a must for every individual in every profession.

The literature specifically designates the responsibility for in-service training to the teacher training program in vocational agriculture education at the land-grant institution, Oklahoma State University.

In addition to formal course work, the state department and the university department of agricultural education will cooperatively maintain a non-credit program of workshops, short courses, and institutes designed to develop and maintain teaching skills and competencies. Throughout the literature concerning agricultural in-service education, one distinct characteristic was very prevalent--that all parties must be involved in the planning process if the program is to be effective and successful.

Change appears to be an inevitable phenomenon. Teachers must understand the complexities of today's agriculture as well as the diversity of interest, motivation, and ability of today's student. Vocational agriculture teachers need to know those disciplines that relate to the daily needs of boys and girls. Precisely stated, the problem is to make education relevant to the needs of boys and girls. In this connection, it is well to keep in mind that the competency of the teacher is more important than the number of courses or credit hours accumulated on a transcript or the amount of occupational experience the teacher has had. A long-time aim of teacher educators should be to move away from present methods of certifying teachers and move toward a carefully developed list of competencies needed by the teacher. A carefully developed set of criteria for measuring the competence of the teacher or prospective teacher in terms of his performance and certification on the basis of demonstrated performance and on recommendations of the training institution must also be included.

CHAPTER III

DESIGN AND CONDUCT OF THE STUDY

The purpose of this chapter is to describe the methods and procedures used in conducting this study. These were dictated by the central purpose of the study, which was to establish how Oklahoma vocational agriculture teachers perceived their degree of competence within selected areas of their program; when, where, and by whom these competencies should be developed; and the priority of each for training programs in the future. Seven specific objectives were formulated and served as guidelines for the design and conduct of the investigation. These objectives were as follows:

1. To determine the degree of competence vocational agriculture teachers felt they possessed in the areas of:
 - a. Organization and management of vocational agriculture departments.
 - b. Vocational agriculture supervised project program.
 - c. FFA chapter advisement.
 - d. FFA fairs, shows, and contests.
 - e. Vocational agriculture occupational training.
 - f. Conducting young farmer and/or adult program.
 - g. Making use of local advisory committee.
 - h. Agricultural economics.
 - i. Agronomy and/or plant science.

- j. Animal science.
 - k. Mechanized agriculture.
2. To determine the priority of competency as assigned by the teachers.
 3. To determine when the training should be provided within the program as perceived by the teachers.
 4. To determine the instructors the teachers would prefer to conduct the training offered.
 5. To determine where the training programs should be held.
 6. To determine if the teachers felt a need for a first year in-service training program for new vocational agriculture teachers.
 7. To determine the type of training sessions to be offered at summer conference.

In order to collect data pertaining to the purpose and objectives developed for guidance of the study effort, it was necessary to accomplish the following tasks:

1. Determine the population of the study.
2. Develop the instrument for data collection.
3. Develop a procedure for data collection.
4. Select methods of data analysis.

The Study Population

The population of this study was the 408 certified vocational agriculture teachers under contract with the secondary public schools in Oklahoma for the purpose of teaching vocational agriculture to high school students for the school year 1974-75.

Development of the Instrument

The most effective means of collecting the data was felt to be a questionnaire that could be handed out to the vocational agriculture teachers attending the Oklahoma Vocational Agriculture Teachers Mid-Winter Conference, held at the Hilton Inn West, Oklahoma City, Oklahoma, January 3 and 4, 1975.

In constructing the instrument, the following recommendations concerning appearance and effectiveness were considered (17):

1. Questions should be separated by dotted lines or extra spaces, distinguished by boldface type, etc., to ensure that the respondent will answer the right question.
2. The type should be varied to emphasize the important words, phrases, or instructions.
3. Check lists, fill-ins, and multiple choice questions should be conveniently arranged. Category designations and space for answers should be placed close together to avoid the possibility, a series of dots leading from the category to the answer space is helpful.
4. When the questionnaire is necessarily very long, it should look as short as possible (pp. 571-572).

The following guides for construction of a questionnaire are a summary of comments made by several students of the field--Suchman (18), Parten (19), Wallace (20). These guidelines were utilized to ensure a systematic format:

1. The questions should be stated simply and clearly in words commonly used by the respondents; they must be relevant and meaningful; the categories to be checked should cover the full range of answers the respondents can give to the questions.
2. Questions should be worded so that they will not be easier for the respondent to answer one way or another.
3. The position of a question in relation to other questions frequently affects the response.

4. Whenever possible, a simple and convenient response system should be used.
5. It may be advisable to encourage the respondent to supply additional information not adequately tapped or specified by the questionnaire, because adhering to the categories or alternatives of a rigidly structured questionnaire may prove frustrating to some respondents. A final question may be provided at the end of the questionnaire, or at the end of a specific section, which invites the respondent to discuss any problem that is important to him.

The format of the instrument used was patterned after one developed and used by Updyke (21) in his study, "New Teachers' Perception of Pre-Service Agricultural Education at Oklahoma State University." The instrument was developed in two parts. In the first part, 11 major variables were identified by the author and his dissertation adviser and included a major portion of the duties required of a teacher of vocational agriculture and also identified most of the agricultural course areas included in the program. The variables in the form of areas of competence were these:

1. Organization and Management of the Vocational Agriculture Department.
2. Vocational Agriculture Supervised Project Program.
3. FFA Chapter Advisement.
4. FFA Fairs, Shows, and Contests.
5. Vocational Agriculture Occupational Training.
6. Conducting the Young Farmer and/or Adult Program.
7. Making Use of the Local Advisory Committee.
8. Agricultural Economics.
9. Agronomy and/or Plant Science.
10. Animal Science.
11. Mechanized Agriculture.

For each of the areas included on the instrument, respondents were required to indicate several things. The first part asked the teachers to recommend when the competency should be taught; the second asked them to say who should teach the competence; the third asked them to indicate where the competence should be taught; the fourth part asked them to rate their competence on each variable; and part five asked them to list by priority when the in-service training should be offered. All five parts were rated on a five point Likert type scale. The first three parts allowed the teachers the privilege of marking more than once. The fourth and fifth parts asked them to mark only once.

The second part was developed to allow the teacher to answer "Yes" or "No" to four specific questions. The first question was to determine how they felt about a first year new teacher program. The next three questions concerned types of special interest groups and preferences of training sessions offered at vocational agriculture teacher's part of the Oklahoma Vocational-Technical Education Summer Conference.

Extra lines were provided at the bottom of the questionnaire for comments from the teachers concerning in-service training.

The questionnaire was reviewed by members of the Agricultural Education Staff, Oklahoma State University, and members of the State Staff for Vocational Agriculture, Stillwater, Oklahoma.

Necessary changes, deletions, and additions were made from suggestions for change by members of the two separate staffs. These were incorporated prior to the final printing of the questionnaire.

To promote ease of handling and filling out, it was decided to print the questionnaire on heavy cardboard.

Collection of the Data

The instruments were sorted so each teacher in each of the five state districts would receive a questionnaire. The investigator delivered the questionnaire to the Vocational Agriculture Teachers' Mid-Winter Conference, Oklahoma City, Oklahoma, and at 6:00 p.m. members of the Agricultural Education Staff and members of the State Staff for Vocational Agriculture had the teachers complete the questionnaires while they were in their district meetings. Only teachers attending their district sessions at this time were surveyed. Of the 408 possible, 376 questionnaires (92.2 percent) were completed and turned in January 3, 1975. Twenty-four were discarded because the name was omitted. Three hundred fifty-two questionnaires were used, which was 86.3 percent of the 408 vocational agriculture teachers under contract for the 1974-75 school year.

Analysis of Data

The questionnaire developed contained two main parts with the first being subdivided by 11 different types of competencies. The respondents were permitted to make more than one response on the first three parts. Parts I, II, and III were summarized by item counts and percentages. The respondents were permitted to mark only once on Part IV and Part V. Parts IV and V responses were summarized by item counts, percentages, and mean responses. The first five parts of the questionnaire were subjected to responses on a five point Likert type scale.

The second major part of the questionnaire was composed of four questions which required a "Yes" or "No" answer. Responses to these were

calculated by number and percentages.

The questionnaires were assembled for tabulation into the five vocational agriculture supervisory districts in the State of Oklahoma as follows:

Supervisory Districts:

Southeast
Southwest
Central
Northeast
Northwest

The questionnaires were further sorted and tabulated by the vocational agriculture supervisory districts and by years of teaching experience as follows:

Years of Experience

0 - 10
11 - 20
21 plus

To permit statistical treatment of the data in Parts IV and V, numerical values were assigned to the categories according to the following pattern. This permitted the investigator to obtain the mean responses according to the following pattern:

<u>Part IV</u>		<u>Part V</u>		<u>Range for</u>
<u>Category</u>	<u>Value</u>	<u>Category</u>	<u>Value</u>	<u>Mean Response</u>
Outstanding	4	Critical	4	3.5 - 4.00
Above Average	3	High	3	2.5 - 3.49
Average	2	Medium	2	1.5 - 2.49
Below Average	1	Low	1	0.5 - 1.49
None	0	None	0	0.0 - 0.49

Data collected were analyzed comparing responses of groups by different years of teaching experience and by supervisory districts. Then simply by adding the district responses together, analysis of data was obtained from all the respondents in the State of Oklahoma.

Summary of Study Design and Method

The design of the study centered about the terminal objective of securing and analyzing data pertinent to the development and implementation of a competency-based, well-coordinated, and complete training program for present and prospective teachers of vocational agriculture. A major premise which dictated design was that teachers can and do recognize their own degrees of competency in both efforts leading to successful agricultural production, servicing, and distribution, but also the extent to which they possess those competencies which might be classified as informative, interpretative, motivative, and catalytic in relation to the individual student. Accepting this premise, the first major task was to secure from individual teachers their self-assessment of competencies possessed. Along with this personal assessment was the need to secure judgements from these same teachers as to "when," "where," and "by whom" data for the teaching of competencies needed in the profession.

The analysis of data summarized from 352 questionnaires yielded information concerning teacher experience by number and percentage; teacher competence and priority for pre- and in-service training programs by number, percent, and mean response; teacher responses as to when to teach, who to teach, and where to teach by number and percent; and the specific questions for a first year teacher program and the type of in-service training for summer conference by number and percentage. Also selected comments recorded from vocational agriculture teachers concerning pre- and in-service training programs were included.

The final element in the design called for firm and securely based

evaluation, implication, and recommendation. It was the firm intention of the investigator to so design the study as to lead directly into the development and implementation of an in-service training program, a program closely coordinated with a somewhat revised and perhaps more effective program of pre-service education. Both of these efforts would be accomplished with close coordination and joint effort among teachers, teacher educators, and supervisors.

CHAPTER IV

PRESENTATION AND ANALYSIS OF DATA

Introduction

The primary purpose of this study was to establish how Oklahoma vocational teachers perceived their degree of competence for selected areas of their program; when, where, and by whom these competencies should be developed; and the priority of each for teacher training programs in the future.

Data for the study were collected from a potential population of all certified vocational agriculture teachers under contract with an Oklahoma secondary public school to teach vocational agriculture for the 1974-75 school year. There were 408 certified vocational agriculture teachers employed in Oklahoma in 1974-75.

A total of 376 questionnaires, 92.2 percent of the total possible, were completed and returned at the Oklahoma Vocational Agriculture Teachers' Conference, Oklahoma City, Oklahoma, Friday, January 3, 1975. Of these, a total of 352 questionnaires were adequate for use in the study.

The 352 usable questionnaires were completed by vocational agriculture teachers from the various vocational agriculture supervisory districts in Oklahoma according to the patterns illustrated in Table I.

Findings of the Study

The following section of this chapter attempts to present and analyze

data collected relative to the competencies and questions. To facilitate presentation of these responses, the first portion will present and analyze findings regarding 11 areas of the program relative to teacher ratings of their competence in each and the priority of when training should be offered relative to each area. The second part presents and analyzes 11 areas studied relative to teacher opinions of when to teach, who should teach, and where to teach the competencies. The third section covers the teacher responses to four questions.

In order to make comparisons across groups, there was a need to determine average responses. Because this resulted in decimal fractions, a range of numerical values was established for each response category as follows:

<u>Mean Response Range</u>	<u>Degree of Teacher Competence</u>	<u>Priority for Offering In- Service Training Programs</u>
3.5 - 4.00	Outstanding	Critical
2.5 - 3.49	Above Average	High
1.5 - 2.49	Average	Medium
0.5 - 1.49	Below Average	Low
0.0 - 0.49	None	None

Teacher Competence and In-Service Training Priority

The following tables and analyses are offered to determine how vocational agriculture teachers perceived their competence in the 11 areas studied and their perceptions of the priority in which these 11 competencies should be offered.

Distribution of Respondents by Experience

Groups and Supervisory Districts

Table I was formulated to summarize distribution of the 352 questionnaires used in this study. With reference to state totals, 215 (61.1 percent) were in the 0 - 10 year experience groups. Breakdown by supervisory districts and percentages of this group revealed the Southwest District had the highest with 45 (64.3 percent); second was Northeast District with 53 (68.3 percent). The Northwest had the third highest with 33 (62.3 percent). The Central District was next with 44 (58.0 percent). The Southeast District with 40 (57.1 percent) had the lowest percent.

The older teachers who have had 21 or more years experience were a distant second with 73 (20.7 percent) of the state total. Broken down by supervisory districts and percentages, they fell in the following order: Central District 21 (27.5 percent), Southeast District 17 (24.3 percent); Southwest District 13 (18.6 percent), Northeast District 15 (18.1 percent), and the Northwest with 7 (13.3 percent).

Those in the 11 - 20 years experience group had the lowest number, 64 (18.2 percent), of the state total. Broken down by supervisory districts and percentages, they fell in the following order: Northwest District 13 (24.5 percent), Southeast District 13 (18.6 percent), Northeast District 13 (24.5 percent), Southwest District 12 (17.1 percent), and the Central District with 11 (14.5 percent) was last.

The 352 questionnaires were completed by teachers from the supervisory districts in this following order. The largest number of questionnaires were completed by teachers of the Northeast District 83 (23.6

TABLE I
DISTRIBUTION OF RESPONDENTS BY EXPERIENCE
GROUPS AND SUPERVISORY DISTRICTS

Experience Groups	Districts										State Total	
	S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%
0 - 10	40	57.1	45	64.3	44	58.0	53	63.8	33	62.3	215	61.1
11 - 20	13	18.6	12	17.1	11	14.5	15	18.1	13	24.5	64	18.2
21 +	17	24.3	13	18.6	21	27.5	15	18.1	7	13.3	73	20.7
Sub Total	70	100.0	70	100.0	76	100.0	83	100.0	53	100.0	352	100.0
% by Supervisory Districts		19.9		19.9		21.6		23.6		15.0		100.0

percent). The Central District teachers were second with 76 (21.6 percent). A tie was recorded for teachers from the Southeast and Southwest Districts with 70 (19.1 percent). The lowest number was 53 (15.0 percent) recorded by teachers of the Northwest District.

Organization and Management of Vocational

Agriculture Departments

Inspecting the data in Table II indicates the overall mean response as to the perceived degree of competence held by teachers was 2.26 (average). Compared by districts, the mean response by groups ranged from a high of 2.48 (average) by teachers of the Northwest District to a low of 2.17 (average) for teachers in the Northeast District. In comparing by experience groups, the highest rating of 2.34 (average) was assigned by teachers with 21 or more years experience. A rating of 2.20 (average) was computed for younger teachers in the 0 - 10 year experience group. As can be determined by evaluation of the data, the patterns of responses between and within groups were quite comparable with all of them falling into the "average" category.

Further analysis of the data in Table II indicates that the overall mean responses for the priority of in-service training in organization and management of vocational agriculture departments was 2.61 (high priority). Teachers in the 11 - 20 years experience group gave the highest priority rating of 2.64 (high). Teachers in the 21 plus years experience group had the lowest priority rating of all the experience groups with a 2.59, but this was still at the high priority level. Northwest District teachers gave the highest overall priority rating of 2.66 (high). Teachers in the Northeast District gave the lowest priority rating 2.57 (high).

TABLE II

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF ORGANIZATION AND MANAGEMENT OF VOCATIONAL AGRICULTURE DEPARTMENTS

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	6	2.8	3	5.2	2	2.6	1	1.4	3	4.3	2	2.7	2	2.4	3	5.6	11	3.1
Above Average	52	24.2	17	29.3	26	33.8	16	23.2	19	27.5	24	32.0	14	16.9	22	40.7	95	27.1
Average	140	65.1	34	58.6	45	58.4	49	71.0	36	52.2	43	57.3	63	75.9	28	51.8	219	62.6
Below Average	14	6.5	4	6.9	4	5.2	3	4.4	10	14.5	5	6.7	4	4.8	0	0	22	6.3
None	3	1.4	0	0	0	0	0	0	1	1.5	1	1.3	0	0	1	1.9	3	0.9
SUB TOTAL	215	100.0	58	100.0	77	100.0	69	100.0	69	100.0	75	100.0	83	100.0	54	100.0	350	100.0
\bar{x} Response	2.20		2.33		2.34		2.22		2.20		2.28		2.17		2.48		2.26	
IN-SERVICE TRAINING PRIORITY																		
Critical	20	9.4	7	11.9	6	7.9	8	11.6	10	14.3	4	5.5	6	7.2	5	9.4	33	9.5
High	107	50.2	27	45.8	38	50.0	29	42.0	35	50.0	41	56.2	40	48.2	27	50.9	172	49.4
Medium	69	32.4	22	37.3	27	35.4	28	40.6	18	25.7	21	28.8	32	38.6	19	35.8	118	33.9
Low	15	7.0	3	5.0	5	6.7	4	5.8	5	7.1	7	9.5	5	6.0	2	3.9	23	6.6
None	2	1.0	0	0	0	0	0	0	2	2.9	0	0	0	0	0	0	2	0.6
SUB TOTAL	213	100.0	59	100.0	76	100.0	69	100.0	70	100.0	73	100.0	83	100.0	53	100.0	348	100.0
\bar{x} Response	2.60		2.64		2.59		2.59		2.66		2.58		2.57		2.66		2.61	

All of the mean responses by teaching years experience and by supervisory districts were close and resulted in rating this competence as high priority.

Vocational Agriculture Supervised

Project Program

Data summarized in Table III revealed the overall perceived competence of teachers in the area of supervised project programs was 2.22 (average). Teachers in the 21 plus years teaching experience group had the highest mean response of 2.27 (average). The teachers with 0 - 10 years experience were very close behind with a 2.25 (average), while teachers with 11 - 20 years experience rated themselves lowest with 2.07 (average). Teachers from the Northwest and Southwest Districts rated themselves highest with 2.38 (average) and 2.28 (average) respectively. The group with the lowest self rating was made up of teachers from the Northeast District who indicated their degree of competence was 2.14 (average). For priority of in-service training for the area of supervised project programs, an overall mean response of 2.69 (high) priority was found. Teachers from the 21 plus experience group gave the highest priority rating with 2.77 (high). Teachers from the 11 - 20 years experience group gave the lowest with a 2.55 (high priority). Teachers from the Southwest District gave the second highest rating with 2.73 (high). As can be seen, all of the groups gave this area a high priority rating on the average for in-service training programs.

TABLE III

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF VOCATIONAL AGRICULTURE SUPERVISED PROJECT PROGRAM

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	8	3.9	1	1.7	3	4.1	2	3.0	5	7.7	3	4.1	2	2.5	0	0	12	3.6
Above Average	54	26.6	11	18.6	25	34.2	15	22.7	14	21.5	15	20.5	23	29.1	23	44.2	90	26.9
Average	122	60.1	41	69.5	36	49.3	43	65.2	41	63.1	47	64.4	42	53.2	26	50.0	100	59.4
Below Average	18	8.9	3	5.1	7	9.6	5	7.6	4	6.2	8	11.0	8	10.1	3	5.8	28	8.4
None	1	0.5	3	5.1	2	2.8	1	1.5	1	1.5	0	0	4	5.1	0	0	6	1.7
SUB TOTAL	203	100.0	59	100.0	73	100.0	66	100.0	65	100.0	73	100.0	79	100.0	52	100.0	335	100.0
\bar{x} Response	2.25		2.07		2.27		2.18		2.28		2.18		2.14		2.38		2.22	
IN-SERVICE TRAINING PRIORITY																		
Critical	26	12.9	4	6.7	9	13.0	7	10.9	9	14.1	8	11.3	11	13.9	4	7.7	39	11.8
High	97	48.3	30	50.0	37	53.6	31	48.4	31	48.4	38	53.5	36	45.6	28	53.8	164	49.7
Medium	71	35.3	21	35.0	22	31.9	24	37.5	23	35.9	22	31.0	27	34.2	18	34.6	114	34.5
Low	6	3.0	5	8.3	0	0	2	3.2	0	0	2	2.8	5	6.3	2	3.9	11	3.3
None	1	0.5	0	0	1	1.5	0	0	1	1.6	1	1.4	0	0	0	0	2	0.7
SUB TOTAL	201	100.0	60	100.0	69	100.0	64	100.0	64	100.0	71	100.0	79	100.0	52	100.0	330	100.0
\bar{x} Response	2.70		2.55		2.77		2.67		2.73		2.70		2.67		2.65		2.69	

FFA Chapter Advisement

The data summarized in Table IV disclosed that teachers in the state felt they had an average degree of competence for serving as FFA advisors according to the 2.18 overall mean response. The teachers in the 11 - 20 and 21 plus experience group were high with mean responses of 2.26 (average) each. The younger teachers, 0 - 10 years experience, were considerably below this with a mean response of 2.11; however, this was still in the average range. Teachers from the Southwest District rated themselves lowest with 2.06 (average). The teachers of the Southeast and Northeast Districts gave themselves the highest mean ratings of 2.25 (average), which indicated they perceived they had an average level of competence.

Teachers placed high priority on this area as determined by their overall mean response of 2.69. The teachers with 21 or more years experience gave it the highest rating of 2.73 (high priority) of all the teaching years experience groups. The lowest mean response of 2.68 was found for the 0 - 10 and 11 - 20 years groups. Teachers from the Northeast District showed a mean response of 2.79 (high priority), while the lowest mean response of 2.51, also high priority, was shown by teachers from the Southeast District. Taken together, all groups and supervisory districts listed this competence as being of high priority for an in-service program.

FFA Fairs, Shows, and Contests

Examination of the data in Table V indicates a teacher-perceived overall mean competence rating for the area of FFA fairs, shows, and

TABLE IV

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF FFA CHAPTER ADVISEMENT

Comparison Factor	Distribution by Years Experience						Distribution by Districts								Overall Total			
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		Total	
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
TEACHER COMPETENCE:																		
Outstanding	8	3.8	8	12.7	2	2.7	9	12.3	3	4.3	3	4.1	3	3.7	0	0	18	5.2
Above Average	39	18.4	14	22.2	22	30.1	12	16.4	10	14.5	21	28.8	20	24.7	12	23.1	75	21.6
Average	136	64.1	30	47.6	42	57.5	42	57.5	45	65.2	37	50.7	52	64.2	32	61.5	208	59.8
Below Average	27	12.7	9	14.3	7	9.7	8	11.0	10	14.5	11	15.1	6	7.4	8	15.4	43	12.4
None	2	1.0	2	3.2	0	0	2	2.8	1	1.5	1	1.3	0	0	0	0	4	1.0
SUB TOTAL	212	100.0	63	100.0	73	100.0	73	100.0	69	100.0	73	100.0	81	100.0	52	100.0	348	100.0
\bar{x} Response	2.11		2.26		2.26		2.25		2.06		2.19		2.25		2.08		2.18	
IN-SERVICE TRAINING PRIORITY																		
Critical	26	12.6	6	10.5	6	9.1	7	11.5	9	13.8	5	7.2	12	14.8	5	9.4	38	11.6
High	98	47.6	29	50.9	37	56.1	23	37.8	29	44.6	42	60.9	42	51.9	28	52.8	164	49.8
Medium	73	35.4	21	36.8	22	33.3	27	44.3	24	36.9	21	30.4	25	30.9	19	35.8	116	35.3
Low	8	3.9	0	0	1	1.5	2	3.2	3	4.7	1	1.5	2	2.4	1	2.0	9	2.7
None	1	0.5	1	1.8	0	0	2	3.2	0	0	0	0	0	0	0	0	2	0.6
SUB TOTAL	206	100.0	57	100.0	66	100.0	61	100.0	65	100.0	69	100.0	81	100.0	53	100.0	329	100.0
\bar{x} Response	2.68		2.68		2.73		2.51		2.68		2.72		2.79		2.70		2.69	

TABLE V

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF FFA FAIRS, SHOWS, AND CONTESTS

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
TEACHER COMPETENCE:																		
Outstanding	8	4.0	3	5.3	1	1.4	2	3.8	5	7.6	1	1.4	2	2.5	2	4.0	12	3.6
Above Average	77	38.1	15	26.3	23	31.9	5	9.4	20	30.3	28	38.4	23	29.1	29	58.0	115	34.7
Average	108	53.5	36	63.2	43	59.7	44	83.0	39	59.1	42	57.5	43	54.5	19	38.0	187	56.5
Below Average	9	4.4	3	5.2	5	7.0	2	3.8	2	3.0	2	2.7	11	13.9	0	0	17	5.2
None	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUB TOTAL	202	100.0	57	100.0	72	100.0	53	100.0	66	100.0	73	100.0	79	100.0	50	100.0	331	100.0
\bar{x} Response	2.42		2.32		2.28		2.13		2.42		2.38		2.20		2.66		2.37	
IN-SERVICE TRAINING PRIORITY																		
Critical	36	18.2	9	15.8	4	7.1	3	6.0	20	32.2	5	7.1	12	15.4	9	17.6	49	15.8
High	111	56.1	33	57.9	39	69.6	29	58.0	31	50.0	47	67.1	49	62.8	27	52.9	183	58.8
Medium	45	22.7	14	24.6	13	23.3	15	30.0	11	17.8	17	24.3	16	20.5	13	25.5	72	23.1
Low	5	2.5	1	1.7	0	0	2	4.0	0	0	1	1.5	1	1.3	2	4.0	6	1.9
None	1	0.5	0	0	0	0	1	2.0	0	0	0	0	0	0	0	0	1	0.4
SUB TOTAL	198	110.0	57	100.0	56	100.0	50	100.0	62	100.0	70	100.0	78	100.0	51	100.0	311	100.0
\bar{x} Response	2.89		2.88		2.84		2.62		3.14		2.80		2.92		2.84		2.88	

contests to be 2.37 (average). Teachers from the Northwest District gave themselves the highest rating with 2.66 (above average). Teachers from the Southeast District rated themselves lowest with 2.13 (average). The youngest teachers, 0 - 10 years experience, rated themselves highest in the teaching years experience groups with 2.42 (average), while the 21 and over teacher experience group was lowest among the groups with 2.28 (average).

Data presented in Table V reveal the teacher overall mean response as to the priority for training for the area of FFA fairs, shows, and contests was at a high level as indicated by the 2.88 response. Teachers from the Southwest District listed the highest priority with their response of 3.14 (high) followed by teachers from the Northeast District with their 2.92 (high). Although teachers from the Southeast District had the lowest level of priority response (2.62) to this competence, they still rated it at the high level. By years experience the teacher responses were very close, listed in the following order: 0 - 10 years, 2.89 (high); 11 - 20 years, 2.88 (high); and 21 years and over, 2.84 (high) priority. All experience groups and supervisory district groups responses indicated high priority for this competence.

Vocational Agriculture Occupational Training

As reported in Table VI, the overall mean responses of the teachers establishe that they consider their competence in the vocational agriculture occupational training area relatively low. Teachers from the Central District gave the highest mean response of 1.95 (average); next were teachers from the Southwest District with 1.86 (average). Teachers with 21 or more years experience expressed a 1.87 (average) degree of

TABLE VI

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF VOCATIONAL AGRICULTURE OCCUPATIONAL TRAINING

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	2	1.0	0	0	0	0	0	0	0	0	2	2.7	0	0	0	0	2	0.6
Above Average	19	9.8	2	3.5	11	15.7	7	11.1	9	13.8	10	13.7	3	4.4	3	5.9	32	10.0
Average	118	61.1	39	52.6	39	55.7	39	61.9	38	58.5	43	58.9	40	58.8	27	52.9	187	58.4
Below Average	53	27.5	24	42.1	20	28.6	16	25.4	18	27.7	18	24.7	25	36.8	20	39.2	97	30.3
None	1	0.6	1	1.8	0	0	1	1.6	0	0	0	0	0	0	1	2.0	2	0.7
SUB TOTAL	193	100.0	57	100.0	70	100.0	63	100.0	65	100.0	73	100.0	68	100.0	51	100.0	320	100.0
\bar{x} Response	1.86		1.58		1.87		1.51		1.86		1.95		1.68		1.63		1.74	
IN-SERVICE TRAINING PRIORITY																		
Critical	11	5.8	2	3.6	3	4.3	3	5.0	4	6.1	1	1.4	5	7.4	3	6.0	16	5.1
High	70	36.8	19	34.5	31	44.9	24	40.0	27	40.9	30	42.9	19	27.9	20	40.0	120	38.2
Medium	90	47.4	28	50.9	31	44.9	28	46.7	32	48.5	34	48.6	34	50.0	21	42.0	149	47.4
Low	17	8.9	5	9.1	3	4.4	4	6.7	3	4.5	4	5.7	8	11.8	6	12.0	25	8.0
None	2	1.1	1	1.9	1	1.5	1	1.6	0	0	1	1.4	2	2.9	0	0	4	1.3
SUB TOTAL	190	100.0	55	100.0	69	100.0	60	100.0	66	100.0	70	100.0	68	100.0	50	100.0	314	100.0
\bar{x} Response	2.37		2.29		2.46		2.40		2.48		2.37		2.25		2.40		2.38	

competence, and then the youngest teachers, 0 - 10 years experience group, responded at a 1.83 or average level. The lowest mean response was shown by teachers from the Southeast District with 1.51, which was very close to a below average response.

Plan of the data in Table VI indicates the teachers would like to improve their competence in VAOT. The highest mean response of 2.48 (medium) priority was shown by teachers of the Southwest District. At the lower end, teachers of the Northeast District responded with a mean response of 2.25 (medium priority). The 21 years and over experience group had a mean response of 2.46 (medium) for the high for experience group responses, while the lowest level of response, a 2.29 or medium priority, was exhibited by the 11 - 20 year experience group. All groups and supervisory districts gave medium priority to this competence on the average.

Conducting Young Farmer and/or Adult Program

Table VII contains findings regarding the area of conducting young and/or adult farmer programs which disclose that teachers in the Southeast District assigned the highest mean response of 2.03 (average competency level) contrasted with teachers in the Southwest District who provided the lowest response of 1.76 which was above average. Teachers in the 21 years and more experience group felt their competence in this area was average, according to their 2.00 mean response. All the mean responses of the experience and supervisory districts groups were close and fell in the average priority classification.

A summary of data for the state as a whole in Table VII indicates an overall mean response of 2.48 (medium priority) for the area of

TABLE VII

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF CONDUCTING YOUNG FARMER AND/OR ADULT PROGRAM

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
TEACHER COMPETENCE:																		
Outstanding	3	1.5	0	0	2	2.9	1	1.6	2	3.0	1	1.5	0	0	1	2.0	5	1.5
Above Average	23	11.6	8	14.3	10	14.7	12	19.0	3	4.5	9	13.4	8	10.5	9	17.6	41	12.7
Average	124	62.3	32	57.1	43	63.2	39	61.9	41	62.1	43	64.2	53	69.7	23	45.1	100	61.6
Below Average	42	21.1	16	28.6	12	17.6	10	15.9	17	25.8	12	17.9	13	17.1	18	35.3	70	21.7
None	7	3.5	0	0	1	1.6	1	1.6	3	4.6	2	3.0	2	2.7	0	0	8	2.5
SUB TOTAL	199	100.0	56	100.0	68	100.0	63	100.0	66	100.0	67	100.0	76	100.0	51	100.0	323	100.0
\bar{x} Response	1.86		1.86		2.00		2.03		1.76		1.93		1.88		1.86		1.89	
IN-SERVICE TRAINING PRIORITY																		
Critical	11	5.3	5	9.3	3	4.4	3	5.2	4	5.2	2	3.0	6	8.0	4	7.8	19	5.8
High	81	39.3	27	50.0	37	54.4	28	48.3	29	37.7	35	52.2	35	46.7	18	35.3	145	44.2
Medium	100	48.5	17	31.5	27	39.7	23	39.7	42	54.5	28	41.8	30	40.0	21	41.2	144	43.9
Low	12	5.9	2	3.7	1	1.5	3	5.2	1	1.3	2	3.0	3	4.0	6	11.8	15	4.6
None	2	1.0	3	5.5	0	0	1	1.6	1	1.3	0	0	1	1.3	2	3.9	5	1.5
SUB TOTAL	206	100.0	54	100.0	68	100.0	58	100.0	77	100.0	67	100.0	75	100.0	51	100.0	328	100.0
\bar{x} Response	2.42		2.54		2.62		2.50		2.44		2.55		2.56		2.31		2.48	

conducting young farmer and/or adult programs. However, five of the groups had mean responses giving a high priority rating for this competence. Teachers from the 21 and over years experience group yielded the highest mean response of 2.62 (high priority). Other high priority mean responses by groups are listed as follows: Northeast District, 2.56; Central District, 2.55; 11 - 20 years experience group, 2.54; and Southeast District, 2.50. Teachers from the Southwest District gave it a 2.44 (medium priority); 0 - 10 years experience group, 2.42 (medium priority); and Northwest District the lowest of 2.31 (medium priority) responses.

Making Use of Local Advisory Committee

Analysis of the data in Table VIII clearly indicates teachers gave their level of competency for making use of local advisory committees a somewhat low rating. The overall mean response was 1.70, which was a low average. The highest mean response came from the 21 and over years teaching experience group with a 1.91 (average). Teachers from the Southwest and Central Districts tied with a 1.82 (average) mean response. The lowest mean response of 1.29 (below average) was indicated by teachers in the 11 - 20 years experience group.

All of the mean responses in Table VIII show teachers felt this competence was of medium priority for in-service training. However, it should be pointed out that they are low in the medium category. The overall mean response was 2.00 (medium priority). The highest priority mean response was 2.45 (medium) listed by teachers from the Southeast District. The second highest mean response was 2.25 (medium) assigned by teachers of the Northwest District. The lowest priority was 1.90

TABLE VIII

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCY AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF MAKING USE OF LOCAL ADVISORY COMMITTEE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	2	1.0	0	0	0	0	0	0	1	1.5	1	1.5	0	0	0	0	2	0.6
Above Average	21	10.7	6	10.9	10	14.9	5	8.3	11	16.7	10	15.2	4	5.2	7	14.3	37	11.6
Average	99	50.5	23	41.8	41	61.2	38	63.3	31	47.0	34	51.5	36	46.8	24	49.0	163	51.3
Below Average	62	31.6	25	45.5	16	23.9	15	25.0	21	3.8	18	27.3	32	41.6	17	34.7	103	32.4
None	12	6.2	1	1.8	0	0	2	3.4	2	3.0	3	4.5	5	6.4	1	2.0	13	4.1
SUB TOTAL	196	100.0	55	100.0	67	100.0	60	100.0	66	100.0	66	100.0	77	100.0	49	100.0	318	100.0
\bar{x} Response	1.69		1.29		1.91		1.77		1.82		1.82		1.51		1.76		1.70	
IN-SERVICE TRAINING PRIORITY																		
Critical	6	3.0	1	1.9	1	1.5	1	1.7	0	0	0	0	2	2.5	5	10.4	8	2.5
High	49	24.7	19	35.2	20	29.9	7	11.7	26	38.2	22	34.4	21	26.6	12	25.0	88	27.6
Medium	78	39.4	26	48.1	34	50.7	19	31.7	30	44.1	33	51.6	34	43.0	22	45.8	138	43.3
Low	50	25.3	7	13.0	9	13.4	26	43.3	9	13.2	8	12.5	15	19.0	8	16.7	66	20.7
None	15	7.6	1	1.8	3	4.5	7	11.6	3	4.5	1	1.5	7	8.9	1	2.1	19	5.9
SUB TOTAL	198	100.0	54	100.0	67	100.0	60	100.0	68	100.0	64	100.0	79	100.0	48	100.0	319	100.0
\bar{x} Response	1.90		2.22		2.19		2.45		2.16		2.19		1.95		2.25		2.00	

(medium) turned in by the young teachers in the 0 - 10 years experience group. This was followed by the 1.95 (medium priority) from teachers of the Northeast District.

Agricultural Economics

Inspection of the data in Table IX reveals that the overall mean response as to the degree of perceived competence of teachers in the agricultural economics area was 1.94 (average). When compared by districts, it was found the teachers' ratings of their degree of competence in this area ranged from a high of 2.06 (average) for the Southwest group to the 1.82 (average) for teachers of the Northwest District.

By experience group, the older teachers who have had 21 or more years teaching experience indicated the highest level of ability in this area with their mean response of 2.01, which was classified at the medium level. Those in the 11 - 20 years experience group perceived themselves as having the lowest level with their 1.69 (medium) response.

The data summarized in Table IX clearly indicates that the teachers felt a definite need for in-service training in agricultural economics. The overall mean response was 2.58 (high priority). All of the teacher groups gave this competence a high priority rating, except for the Northwest District with 2.48 which was a high medium degree of priority. A tie for the highest priority was shown by the Southwest and Southeast Districts, both with 2.63 (high priority) mean responses. The young teacher group was close with their assignment of 2.60 (high priority). The remaining mean responses were in the following order: Northeast District, 2.59 (high priority); 11 - 20 years experience group, 2.54 (high priority); and the 21 and over years experience and Central District

TABLE IX

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF AGRICULTURAL ECONOMICS

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	3	1.4	0	0	2	2.9	1	1.6	0	0	2	2.9	2	2.5	0	0	5	1.5
Above Average	39	18.7	4	7.3	17	25.0	14	21.9	19	27.9	10	14.3	9	11.2	8	16.0	60	18.1
Average	118	56.5	32	58.2	31	45.6	37	57.8	34	50.0	39	55.7	45	56.3	26	52.0	181	54.5
Below Average	49	23.4	17	30.9	16	23.5	11	17.2	15	22.1	19	27.1	22	27.5	15	30.0	82	24.7
None	0	0	2	3.6	2	3.0	1	1.5	0	0	0	0	2	2.5	1	2.0	4	1.2
SUB TOTAL	209	100.0	55	100.0	68	100.0	64	100.0	68	100.0	70	100.0	80	100.0	50	100.0	332	100.0
\bar{x} Response	1.98		1.69		2.01		2.05		2.06		1.93		1.84		1.82		1.94	
IN-SERVICE TRAINING PRIORITY																		
Critical	25	12.1	4	7.0	5	7.6	6	9.5	8	11.4	5	7.6	11	13.6	4	8.0	34	10.3
High	90	43.5	25	43.9	30	45.4	31	49.2	32	45.7	30	45.4	32	39.5	20	40.0	145	43.9
Medium	78	37.7	26	45.6	25	37.9	23	36.5	26	37.1	25	37.9	32	39.5	23	46.0	129	39.1
Low	13	6.3	2	3.5	6	9.1	3	4.8	4	5.8	6	9.1	6	7.4	2	4.0	21	6.4
None	1	0.4	0	0	0	0	0	0	0	0	0	0	0	0	1	2.0	1	0.3
SUB TOTAL	207	100.0	57	100.0	66	100.0	63	100.0	70	100.0	66	100.0	81	100.0	50	100.0	330	100.0
\bar{x} Response	2.60		2.54		2.52		2.63		2.63		2.52		2.59		2.48		2.58	

tied with 2.52 (high priority) rating.

Agronomy and/or Plant Science

By their 2.02 overall mean response reported in Table X, teachers indicated they had a medium level of competence in agronomy and/or plant science. The highest mean response for this competence was given by both the Southeast and Central District teachers, both with 2.09 (medium) ratings. Teachers in the 21 and over years experience group reported a 2.07 (medium) rating. The lowest mean response of 1.72 (medium) was computed for teachers from the Northeast District.

With an overall mean response of 2.51, the total group of teachers placed a high priority for in-service training in agronomy and/or plant science. The highest mean response was shown by the older teachers, the 21 and over years experience group, with 2.57 (high priority). The other groups were very close to the overall mean response. The Northeast District and 11 - 20 years experience teacher had the lowest mean responses of 2.44 and 2.46, respectively. All responses by all groups fell into the medium priority category.

Animal Science

Although it still was within the medium degree of competence, the 2.31 mean response of the total group of teachers was higher for the area of animal science than for any others studied. These data are summarized in Table XI. By their mean responses, all groups evaluated their competence as being in the medium range. The highest mean response was from the Northwest District with 2.47 (medium). Then, tied for second, were the young teacher group with 0 - 10 years experience

TABLE X

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF AGRONOMY AND/OR PLANT SCIENCE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	5	2.6	0	0	2	2.9	0	0	4	7.1	2	3.0	0	0	1	1.9	7	2.2
Above Average	30	15.5	6	10.9	12	17.4	12	18.8	7	12.5	11	16.4	12	15.2	6	11.5	48	15.1
Average	125	64.4	39	70.9	44	63.8	46	71.8	31	55.4	45	67.2	50	63.3	36	69.3	208	65.4
Below Average	34	17.5	10	18.2	11	15.9	6	9.4	14	25.0	9	13.4	17	21.5	9	17.3	55	17.3
None	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUB TOTAL	194	100.0	55	100.0	69	100.0	64	100.0	56	100.0	67	100.0	79	100.0	52	100.0	318	100.0
\bar{x} Response	2.03		1.93		2.07		2.09		2.02		2.09		1.72		1.98		2.02	
IN-SERVICE TRAINING PRIORITY																		
Critical	11	5.5	3	5.4	3	4.5	3	5.0	2	3.2	2	3.0	5	6.4	5	9.3	17	5.3
High	92	46.0	23	41.1	38	57.6	29	48.3	33	52.4	36	53.7	30	38.5	24	46.3	153	47.5
Medium	86	43.0	27	48.2	19	28.8	24	40.0	25	39.7	25	37.3	37	47.4	21	38.9	132	41.0
Low	9	4.5	3	5.3	6	9.1	4	6.7	2	3.2	4	6.0	6	7.7	2	3.6	18	5.6
None	2	1.0	0	0	0	0	0	0	1	1.5	0	0	0	0	1	1.9	2	0.6
SUB TOTAL	200	100.0	56	100.0	66	100.0	60	100.0	63	100.0	67	100.0	78	100.0	54	100.0	322	100.0
\bar{x} Response	2.51		2.46		2.58		2.52		2.54		2.44		2.57		2.51			

TABLE XI

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF ANIMAL SCIENCE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
TEACHER COMPETENCE:																		
Outstanding	10	4.8	0	0	2	2.7	2	3.0	6	8.5	3	4.3	1	1.2	0	0	12	3.5
Above Average	73	34.8	15	26.3	21	28.0	13	19.7	19	26.8	23	31.9	26	31.7	28	54.9	109	31.9
Average	115	54.8	39	68.4	41	54.7	46	69.7	43	60.6	41	56.9	46	56.1	19	37.3	195	57.0
Below Average	12	5.6	3	5.3	9	12.0	5	7.6	3	4.1	5	6.9	7	8.5	4	7.8	24	7.0
None	0	0	0	0	2	2.6	0	0	0	0	0	0	2	2.5	0	0	2	0.6
SUB TOTAL	210	100.0	57	100.0	75	100.0	66	100.0	71	100.0	72	100.0	82	100.0	51	100.0	342	100.0
\bar{x} Response	2.39		2.21		2.16		2.18		2.39		2.33		1.95		2.47		2.31	
IN-SERVICE TRAINING PRIORITY																		
Critical	48	23.3	9	15.5	7	9.9	12	18.8	15	21.7	9	13.1	21	25.9	7	13.5	64	19.1
High	110	53.4	35	60.3	47	66.2	35	54.7	35	50.7	42	60.9	46	56.8	34	65.3	192	57.3
Medium	45	21.8	14	24.2	16	22.5	17	26.5	16	23.2	17	24.6	14	17.3	11	21.2	74	22.4
Low	3	1.5	0	0	1	1.4	0	0	3	4.4	1	1.4	0	0	0	0	4	1.2
None	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SUB TOTAL	206	100.0	58	100.0	71	100.0	64	100.0	69	100.0	69	100.0	81	100.0	52	100.0	335	100.0
\bar{x} Response	2.98		2.91		2.85		2.92		2.90		2.86		3.09		2.92		2.94	

and the Southwest District group with identical 2.39 (medium) mean responses. Means for other groups were as follows: Central District, 2.33 (medium); 11 - 20 years experience, 2.21 (medium); and the Southeast District, 2.18 (medium); 21 and over years experience, 2.18 (medium); and the Northeast District was last with 1.95 (medium) mean response.

As mentioned previously, the teachers indicated that they possessed the highest competence in animal science. The overall mean response of 2.94 reported in the lower half of Table XI reveals that the teachers felt animal science rated highest in priority among their needs for in-service training programs. The Northeast District teachers rated themselves lowest in animal science. Accordingly, they gave the highest mean response of 2.09 (high priority) rating to their need for in-service training in animal science. The new teachers (0 - 10 years experience) indicated a high priority for this competence with a mean response of 2.98. The other groups were close to the overall mean response. Experienced teachers with 21 or more years experience assigned a lower degree of priority with their 2.85 (high priority) mean response.

Mechanized Agriculture

From the data in Table XII, it was determined that the overall mean response of 2.15 indicated teachers felt they possessed a medium level of competence in mechanized agriculture. Teachers from the Southwest District gave the highest mean response of 2.37 (medium). The group from the Northwest District was next with 2.29 mean response, which was also a medium. Young teachers indicated confidence in their competence in this area with a 2.20 (medium) mean response. Teachers in the Southeast District and in the 11 - 20 years experience group tied with 2.13

TABLE XII

SUMMARY OF RESPONSES AS TO DEGREE OF COMPETENCE AND PRIORITY FOR IN-SERVICE TRAINING FOR THE
AREA OF MECHANIZED AGRICULTURE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										Overall Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
TEACHER COMPETENCE:																		
Outstanding	8	4.0	0	0	0	0	2	3.1	3	4.6	1	1.4	2	2.7	0	0	8	2.5
Above Average	50	24.9	11	20.4	17	25.0	8	12.5	22	33.8	15	21.7	12	16.4	21	40.4	78	24.1
Average	117	58.2	39	72.2	36	52.9	50	78.1	36	55.4	37	53.6	44	60.3	25	48.1	192	59.4
Below Average	26	12.9	4	7.4	14	20.6	4	6.3	4	6.2	16	23.3	14	19.2	6	11.5	44	13.6
None	0	0	0	0	1	1.5	0	0	0	0	0	0	1	1.4	0	0	1	0.4
SUB TOTAL	201	100.0	54	100.0	68	100.0	64	100.0	65	100.0	69	100.0	73	100.0	52	100.0	323	100.0
\bar{x} Response	2.20		2.13		2.01		2.13		2.37		2.01		2.00		2.29		2.15	
IN-SERVICE TRAINING PRIORITY																		
Critical	27	13.6	4	7.1	7	10.0	8	12.3	7	10.8	6	8.7	12	16.4	5	9.4	38	11.7
High	101	50.8	32	57.1	36	51.4	33	50.8	33	50.8	46	66.7	25	34.2	32	60.4	169	52.0
Medium	60	30.1	20	35.8	23	32.9	20	30.8	23	35.4	15	21.7	31	42.5	14	26.4	103	31.7
Low	10	5.0	0	0	4	5.7	3	4.6	2	3.0	2	2.9	5	6.9	2	3.8	14	4.3
None	1	0.5	0	0	0	0	1	1.5	0	0	0	0	0	0	0	0	1	0.3
SUB TOTAL	199	100.0	56	100.0	70	100.0	65	100.0	65	100.0	69	100.0	73	100.0	53	100.0	325	100.0
\bar{x} Response	2.72		2.45		2.66		2.68		2.69		2.81		2.60		2.75		2.70	

(medium) mean responses. Mean responses for experienced teachers 21 and over, 2.01 (medium); Central District, 2.01 (medium); and Northeast, 2.00 (medium) were found to be the lowest levels of response of all groups surveyed.

Table summarized in Table XII also revealed teachers assigned an overall mean response of 2.70 (high priority) to the area of mechanized agriculture as a focus for in-service training. All groups and supervisory districts gave mechanized agriculture a high priority rating, except the 11 - 20 years experience group which yielded a 2.45 (medium priority) mean response. The highest priority rating was indicated by the Central District teachers with a 2.81 (high priority) mean response. Next in line was the Northwest District with 2.75 (high), then young teachers 0 - 10 years experience with 2.72 (high) mean response.

When, Who, Where to Teach Competencies

Organization and Management of Vocational

Agriculture Departments

Table XIII was formulated to summarize responses from 352 Oklahoma vocational agriculture teachers regarding their preferences for development of the competence required to properly organize and manage a vocational agriculture department.

With reference to when to teach or develop this competence, the overall response pattern indicated that 226 (42.6 percent) of the 531 responses were in favor of the Oklahoma State University pre-service program. Next in line was a first year teacher program which received 106 (20.0 percent) of the responses. The number and percentage of

TABLE XIII

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF ORGANIZATION AND MANAGEMENT OF VOCATIONAL AGRICULTURE DEPARTMENT

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	137	41.6	42	48.8	47	40.5	43	34.7	50	58.1	51	37.2	47	35.6	35	67.3	226	42.6
Student Teaching Experience	60	18.3	12	14.0	17	14.7	17	13.7	16	18.6	28	20.4	18	13.6	10	19.2	89	16.8
OSU In-Service Courses	41	12.6	8	9.3	14	12.1	22	17.7	3	3.5	16	11.7	20	15.2	2	3.8	63	11.8
First Year Teacher Program	68	20.5	16	18.6	22	19.0	26	21.0	14	16.3	29	21.1	33	25.0	4	7.8	106	20.0
In-Service Workshop	23	7.0	8	9.3	16	13.7	16	12.9	3	3.5	13	9.6	14	10.6	1	1.9	47	8.8
SUB TOTAL	329	100.0	86	100.0	116	100.0	124	100.0	86	100.0	137	100.0	132	100.0	52	100.0	531	100.0
WHO TO TEACH:																		
OSU Faculty	77	24.6	20	22.5	34	31.2	37	32.7	20	22.0	26	20.3	33	26.0	15	28.8	131	25.6
OSU Ag Ed Faculty	97	31.0	24	27.0	32	29.4	29	25.7	27	29.7	40	31.2	36	28.3	21	40.4	153	29.9
Specialist, State Staff	46	14.7	10	11.2	14	12.8	14	12.4	9	9.9	23	18.0	20	15.7	4	7.7	70	13.7
Specialist, Industry	7	2.2	4	4.5	1	1.0	5	4.4	0	0	3	2.3	2	1.6	2	3.8	12	2.3
Vo Ag Instructor with Expertise	86	27.5	31	34.8	28	25.6	28	24.8	35	38.4	36	28.2	36	28.3	10	19.3	145	28.5
SUB TOTAL	313	100.0	89	100.0	109	100.0	113	100.0	91	100.0	128	100.0	127	100.0	52	100.0	511	100.0
WHERE TO TEACH:																		
OSU Campus	143	50.5	37	43.5	46	43.8	40	37.7	48	60.8	53	47.7	56	45.2	29	54.7	226	47.8
OSU Extension Centers	27	9.5	11	12.9	9	8.6	16	15.1	2	2.5	4	3.6	21	16.9	4	7.5	47	9.9
Vo-Tech Summer Conference	42	14.8	12	14.1	19	18.1	22	20.8	8	10.1	19	17.1	16	12.9	8	15.1	73	15.4
Vo Ag Supervisory Districts	28	9.9	10	11.8	13	12.4	14	13.2	5	6.3	17	15.3	13	10.5	2	3.8	51	10.8
Vo Ag P. I. Meetings	43	15.3	15	17.7	18	17.1	14	13.2	16	20.3	18	16.3	18	14.5	10	18.9	76	16.1
SUB TOTAL	283	100.0	85	100.0	105	100.0	106	100.0	79	100.0	111	100.0	124	100.0	53	100.0	473	100.0

responses for each of the other choices were as follows: student teaching experience, 89 (16.8 percent); Oklahoma State University in-service courses, 63 (11.8 percent); and in-service workshop, 47 (8.8 percent). When responses were grouped according to years of experience and by supervisory districts, the preferences of teachers were found to follow essentially the same pattern. The 0 - 10 and 11 - 20 years experience groups and the Central District teachers responded exactly as indicated above. All groups felt that the pre-service program would be the best time to develop this competence while all the groups except the 21 plus years experience group indicated that in-service would be the least desirable time. All the groups except the Southwest and Northwest Districts felt the second best time would be during the first year of teaching. These groups varied somewhat in their feelings regarding the student teaching and in-service options. However, four of the groups rated student teaching as the third most suitable time and five of the groups felt the in-service program was the fourth best time.

With reference to who should teach, the response patterns indicated that 135 (29.9 percent) of the 511 responses favored teaching by the Oklahoma State University Agricultural Education faculty. This was followed by a preference that the competence be taught by vocational agriculture instructors with expertise expressed by 145 (28.5 percent) and by Oklahoma State University faculty as indicated by 131 (25.6 percent) of the responses. Seventy responses (13.7 percent) favored using specialist, state staff, and only 12 (2.3 percent) chose specialists from industry as desired teachers of competence in this area. An even distribution of responses in the patterns outlined above by teaching years experience and supervisory districts was noted after inspecting

data in Table XIII.

The Oklahoma State University campus was an overall strong first choice of where this competence should be taught as viewed by teachers. There were 226 (47.8 percent) of the 473 responses favoring the Oklahoma State University campus. Next in line of preference was vocational agriculture professional improvement meetings which received 76 (16.1 percent) of the responses. This was followed closely by 73 (15.4 percent) of the responses expressing a choice for vocational and technical education summer conference. The number and percentage of responses for each of the other possible sites were as follows: vocational agriculture supervisory districts, 51 (10.8 percent) and Oklahoma State University extension centers, 47 (9.9 percent).

Vocational Agriculture Supervised

Project Program

Table XIV was formulated to summarize responses from 352 Oklahoma vocational agriculture teachers regarding their feelings toward the competence required to properly supervise project programs.

With reference to when to teach or develop this competence, the pattern indicated that 188 (35.5 percent) of the 529 responses favored Oklahoma State University pre-service programs. This time was the first choice of all age and district groups. Next in line overall was a first year teaching program which received 101 (19.1 percent) of the total responses. This was the second choice of the Southwest, Southeast, and Central Districts teachers and of the 0 - 10 year experience group. The other three times were close with 87 (16.5 percent) responses favoring in-service workshops; 80 responses (15.1 percent) opting for Oklahoma

TABLE XIV

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF VOCATIONAL AGRICULTURE SUPERVISED PROJECT PROGRAM

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	115	34.8	32	35.6	41	37.6	38	32.8	41	45.0	45	32.6	42	32.1	22	41.5	188	35.5
Student Teaching Experience	49	14.8	14	15.6	10	9.2	13	11.2	12	13.2	21	15.2	15	11.5	12	22.6	73	13.8
OSU In-Service Courses	51	15.5	11	12.2	18	16.5	23	19.8	12	13.2	21	15.2	21	16.0	3	5.7	80	15.1
First Year Teacher Program	71	21.5	14	15.6	16	14.7	23	19.8	15	16.5	30	21.7	22	16.8	11	20.8	101	19.1
In-Service Workshop	44	13.4	19	21.0	24	22.0	19	16.4	11	12.1	21	15.3	31	23.6	5	9.4	87	16.5
SUB TOTAL	330	100.0	90	100.0	109	100.0	116	100.0	91	100.0	138	100.0	131	100.0	53	100.0	529	100.0
WHO TO TEACH:																		
OSU Faculty	52	16.9	14	18.4	27	22.7	25	23.6	19	23.2	23	16.4	17	13.8	9	17.3	93	18.5
OSU Ag Ed Faculty	91	29.5	21	27.6	30	25.2	27	25.5	24	29.3	40	28.6	34	27.6	17	32.7	142	28.2
Specialist, State Staff	59	19.2	10	13.2	31	26.0	21	19.8	12	14.6	33	23.6	28	22.8	6	11.5	100	19.9
Specialist, Industry	11	3.6	1	1.3	2	1.7	5	4.7	1	1.2	5	3.6	2	1.6	1	1.9	14	2.8
Vo Ag Instructor with Expertise	95	30.8	30	39.5	29	24.4	28	26.4	26	31.7	39	27.8	42	34.2	19	36.6	154	30.6
SUB TOTAL	308	100.0	76	100.0	119	100.0	106	100.0	82	100.0	140	100.0	123	100.0	52	100.0	503	100.0
WHERE TO TEACH:																		
OSU Campus	115	42.0	31	35.2	41	38.0	41	39.4	42	49.4	39	33.9	42	36.5	23	45.1	187	39.8
OSU Extension Centers	17	6.2	8	9.1	10	9.3	11	10.6	5	5.9	7	6.1	10	8.7	2	3.9	35	7.4
Vo-Tech Summer Conference	41	15.0	13	14.8	16	14.8	18	17.3	7	8.2	19	16.5	23	20.0	3	5.9	70	14.9
Vo Ag Supervisory Districts	39	14.2	11	12.5	12	11.1	16	15.4	10	11.8	20	17.4	11	9.6	5	9.8	62	13.2
Vo Ag P. I. Meetings	62	22.6	25	28.4	29	26.8	18	17.3	21	24.7	30	26.1	29	25.2	18	35.3	116	24.7
SUB TOTAL	274	100.0	88	100.0	108	100.0	104	100.0	85	100.0	115	100.0	115	100.0	51	100.0	470	100.0

State University in-service courses, and 73 (13.8 percent) of the responses favoring the student teaching experience as the most appropriate time. The differences between and among groups regarding preference for the latter three times were, as a rule, found to be quite close.

With reference to who should teach this competence, analysis of the overall findings disclosed 154 (30.6 percent) of the 503 responses favored vocational agriculture teachers with expertise as the first overall choice for teaching this area. This was the first choice of all groups. The 142 responses (28.2 percent) favoring the Oklahoma State University Agricultural Education faculty ranked this teaching group second overall. The number and percentages for each of the other choices for all groups combined were as follows: specialist, state staff, 100 responses (19.9 percent); Oklahoma State University faculty, 93 responses (18.5 percent); while only 14 responses (2.8 percent) chose a specialist from industry. This was the last choice of all groups.

With reference to where to teach this competence, 187 (39.8 percent) of the 470 total responses chose the Oklahoma State University campus. The second highest number of responses, 116 (24.7 percent) chose vocational agriculture professional improvement meetings. Other sites in order by responses were vocational-technical education summer conference, 70 (14.9 percent); vocational agriculture supervisory districts, 62 (13.2 percent); and Oklahoma State University extension centers, 35 (7.4 percent). No major differences were noted between or among responses by experience or district groups.

FFA Chapter Advisement

Table XV contains a summary of responses of vocational agriculture

TABLE XV

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF FFA CHAPTER ADVISEMENT

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	109	33.5	29	33.3	43	40.9	39	35.8	35	39.3	41	31.8	46	33.6	20	37.7	181	35.0
Student Teaching Experience	55	16.9	15	17.2	13	12.4	14	12.8	14	15.7	26	20.2	15	10.9	14	26.4	83	16.1
OSU In-Service Courses	46	14.2	12	13.8	16	15.2	21	19.3	13	14.6	15	11.6	24	17.5	1	1.9	74	14.3
First Year Teacher Program	57	17.6	17	19.5	11	10.5	16	14.7	14	15.7	26	20.2	22	16.1	7	13.2	85	16.4
In-Service Workshop	58	17.8	14	16.2	22	21.0	19	17.4	13	14.7	21	16.2	30	21.9	11	20.8	94	18.3
SUB TOTAL	325	100.0	87	100.0	105	100.0	109	100.0	89	100.0	129	100.0	137	100.0	53	100.0	517	100.0
WHO TO TEACH:																		
OSU Faculty	68	21.2	17	19.8	21	21.0	30	26.8	17	20.0	19	15.0	31	23.8	9	17.0	106	20.9
OSU Ag Ed Faculty	87	27.1	20	23.3	27	27.0	22	19.6	27	31.8	33	26.0	35	26.9	17	32.1	134	26.4
Specialist, State Staff	48	14.9	13	15.1	13	13.0	22	19.6	4	4.7	23	18.1	19	14.6	6	11.3	74	14.6
Specialist, Industry	10	3.1	2	2.3	2	2.0	4	3.6	0	0	6	4.7	3	2.3	1	1.9	14	2.8
Vo Ag Instructor with Expertise	108	33.7	34	39.5	37	37.0	34	30.4	37	43.5	46	36.2	42	32.4	20	37.7	179	35.3
SUB TOTAL	321	100.0	86	100.0	100	100.0	112	100.0	85	100.0	127	100.0	130	100.0	53	100.0	507	100.0
WHERE TO TEACH:																		
OSU Campus	112	39.6	30	31.9	39	38.6	34	34.7	35	42.2	39	33.0	49	38.6	24	46.1	181	37.9
OSU Extension Centers	26	9.2	8	8.5	8	7.9	11	11.2	6	7.2	11	9.3	13	10.2	1	1.9	42	8.8
Vo-Tech Summer Conference	51	18.0	19	20.2	17	16.8	20	20.4	16	19.3	23	19.5	21	16.5	7	13.5	87	18.2
Vo Ag Supervisory Districts	35	12.4	11	11.7	14	13.9	14	14.3	10	12.0	13	11.0	16	12.6	7	13.5	60	12.6
Vo Ag P. I. Meetings	59	20.8	26	27.7	23	22.8	19	19.4	16	19.3	32	27.2	28	22.1	13	25.0	108	22.5
SUB TOTAL	283	100.0	94	100.0	101	100.0	98	100.0	83	100.0	118	100.0	127	100.0	52	100.0	478	100.0

teachers concerning the development of competence required to be an effective FFA chapter advisor.

With reference to when to teach the competence as viewed by the total group of teachers, 181 (35.0 percent) of the 517 responses favored the Oklahoma State University pre-service program. This was the first choice of all groups. The number and percentage of responses overall to the other four time choices were very close as shown following: in-service workshop, 94 responses (18.3 percent); first year teacher program, 85 responses (16.4 percent); student teaching experience, 83 responses (16.1 percent); and Oklahoma State University in-service course was last with 74 (14.3 percent) responses. Although the ranking of some of the preferred times varied from the overall between and among experience and district groups, there were no major numerical differences noted.

With reference to who was preferred to teach this competence, 179 (35.3 percent) of the 507 total responses favored vocational agriculture instructors with expertise, making this the number one preference. Next was Oklahoma State University Agricultural Education faculty which drew 134 (26.4 percent) of the responses. Oklahoma State University faculty was rated next overall with 106 responses (20.9 percent). The fourth preferred teacher group was specialist, state staff with 74 responses (14.6 percent) and specialist, industry rated last with only 14 (2.8 percent) of the responses overall. Five of the response groups ranked the preferred teachers in the same order as detailed above. The remaining three groups varied only slightly from the pattern.

With reference to where to teach this competence, the response pattern indicated that the largest group overall, 181 (37.9 percent) of the

478 responses, favored the Oklahoma State University campus. Next in line was vocational agriculture professional improvement meetings which received 108 (22.5 percent) of the responses. Vocational-technical education summer conference was third with 87 (18.2 percent) responses. The next was vocational agriculture supervisory districts with 60 (12.6 percent); then, Oklahoma State University extension centers with 42 (8.8 percent) of the responses was rated last. Essentially no differences in order of preferences were uncovered for the groups' responses summarized.

FFA Fairs, Shows, and Contests

An effort was made to determine the preferences of vocational agriculture teachers regarding the area of training FFA members for fairs, shows, and contests. Results of this effort are summarized in Table XVI.

With reference to opinions as to when to teach or develop the competence, 159 (27.9 percent) of the total of 570 responses favored in-service workshops. A close second was accorded the time of the Oklahoma State University pre-service program which received 147 (25.4 percent) of the responses. The remaining responses were in a close cluster with Oklahoma State University in-service next with 92 (16.1 percent); then student teaching experience, 90 (15.8 percent); and first year teaching program with 84 (14.8 percent) responses. The responses were somewhat evenly distributed overall for this competence. The variance of rankings for each time by group was also relatively small as was determined by the number and percentage of responses to each.

As reported in Table XVI, 254 (44.6 percent) of the 568 responses favored the teaching of this competence by vocational agriculture teachers

TABLE XVI

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE AREA OF FFA FAIRS, SHOWS, AND CONTESTS

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	97	26.9	20	20.6	28	24.8	27	24.5	33	32.3	34	22.1	36	23.8	15	28.3	145	25.4
Student Teaching Experience	57	15.8	20	20.6	13	11.5	16	14.5	14	13.7	23	14.9	23	15.2	14	26.4	90	15.8
OSU In-Service Courses	54	15.0	15	15.5	23	20.4	26	23.6	13	12.7	30	19.5	23	15.2	0	0	92	16.1
First Year Teacher Program	59	16.4	13	13.4	12	10.6	15	13.7	14	13.7	24	15.6	22	14.6	9	17.0	84	14.8
In-Service Workshop	93	25.9	29	29.9	37	32.7	26	23.7	28	27.6	43	27.9	47	31.2	15	28.3	159	27.9
SUB TOTAL	360	100.0	97	100.0	113	100.0	110	100.0	102	100.0	154	100.0	151	100.0	53	100.0	570	100.0
WHO TO TEACH:																		
OSU Faculty	62	17.3	10	11.1	29	24.4	21	17.8	18	17.5	23	16.1	31	20.5	8	15.1	101	17.8
OSU Ag Ed Faculty	38	10.6	10	11.1	16	13.4	15	12.7	9	8.7	16	11.2	19	12.6	5	9.4	64	11.3
Specialist, State Staff	54	15.0	15	16.7	16	13.4	20	16.9	13	12.6	25	17.5	25	16.6	2	3.8	85	15.0
Specialist, Industry	49	13.6	6	6.7	9	7.6	15	12.7	9	8.7	18	12.6	18	11.9	4	7.5	64	11.3
Vo Ag Instructor with Expertise	156	43.5	49	54.4	49	41.2	47	39.9	54	52.5	61	42.6	58	38.4	34	64.2	254	44.6
SUB TOTAL	359	100.0	90	100.0	119	100.0	118	100.0	103	100.0	143	100.0	151	100.0	53	100.0	568	100.0
WHERE TO TEACH:																		
OSU Campus	92	27.1	23	22.8	26	24.5	28	24.8	27	26.2	29	22.5	41	27.0	17	33.3	142	26.0
OSU Extension Centers	33	9.7	11	10.9	13	12.3	14	12.4	9	8.7	12	9.3	20	13.2	2	3.9	57	10.4
Vo-Tech Summer Conference	86	25.3	26	25.7	31	29.2	32	28.3	18	17.5	48	37.2	39	25.7	6	11.8	143	26.1
Vo Ag Supervisory Districts	56	16.5	15	14.9	13	12.3	21	18.6	21	20.4	13	10.1	22	14.5	7	13.7	84	15.3
Vo Ag P. I. Meetings	73	21.4	26	25.7	23	21.7	18	15.9	28	27.2	27	20.9	30	19.6	19	37.3	122	22.2
SUB TOTAL	340	100.0	101	100.0	106	100.0	113	100.0	103	100.0	129	100.0	152	100.0	51	100.0	547	100.0

with expertise in the area. Oklahoma State University faculty was preferred second, receiving 101 (17.8 percent) of the responses. Next was specialist, state staff, with 85 (15.0 percent); then Oklahoma State University Agricultural Education faculty and specialist, industry, each attracted 64 (11.3 percent) of the responses. Respondents from all the experience groups and district groups rated vocational agriculture instructors with expertise as their top choice. All groups except the 11 - 20 year experience and Central District groups rated Oklahoma State University faculty second. These groups placed the faculty third on their preference list. With a few exceptions, the third, fourth, and fifth choices of who should teach the competence were very similar across the groups.

The total set of responses was analyzed to determine preferences as to where to teach this competence. The largest group, 143 (26.1 percent) of the 547 responses, chose vocational-technical education summer conference as the best site. The second preferred site, the Oklahoma State University campus, was very close behind, receiving 142 (26.0 percent) of the responses. Vocational agriculture professional improvement meetings was a close third with 122 (22.2 percent) of the responses. Other responses were vocational agriculture supervisory districts, 84 responses (15.3 percent) and Oklahoma State University extension centers, 57 responses (10.4 percent). These response levels ranked the latter two sites fourth and fifth, respectively. For the most part, the ranking of the preferred sites within each group followed the same order set by the total group response discussed previously.

Vocational Agriculture Occupational Training

In order to determine the preferences of 352 teachers regarding when, where, and by whom the competence required in the area of vocational agriculture occupational training should be taught, Table XVII was developed.

The overwhelming first preference of all groups regarding when the competence should be taught was during the Oklahoma State University pre-service program. Overall, 196 (39.7 percent) of the responses favored this time. The second choice by all groups combined, attracting 97 (19.7 percent) of the responses, was during in-service workshops. This was the second choice of the 11 - 20 and 21 plus years experience and the Southeast, Northeast, and Northwest District groups. The third preference overall as indicated by the 87 responses (17.6 percent) was Oklahoma State University in-service courses. Concurring with this rating were the 11 - 20 and 21 plus years experience and the Southeast and Northeast District groups. In fourth place as rated by the total group was the student teaching experience, receiving 61 (12.3 percent) of the responses. The least preferred time was during a first year teacher program which received only 53 (10.7 percent) of the responses. Individual groups rating this time last were the 0 - 10 year experience and those from the Central and Northeast Districts.

Teachers were surveyed as to who they felt should teach this competence. All groups except the 21 plus years experience, Central, and Northwest Districts specified as first choice the Oklahoma State University faculty. A total of 134 responses (27.1 percent) favored these teachers. Receiving 121 responses (24.5 percent), the Oklahoma State

TABLE XVII

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF VOCATIONAL AGRICULTURE OCCUPATIONAL TRAINING

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	124	41.1	36	41.9	36	34.0	35	31.5	45	51.1	39	29.8	44	38.9	33	64.7	196	39.7
Student Teaching Experience	40	13.2	8	9.3	13	12.3	8	7.2	7	8.0	24	18.3	16	14.2	6	11.8	61	12.3
OSU In-Service Courses	55	18.2	15	17.4	17	16.0	23	20.7	17	19.3	27	20.6	18	15.9	2	3.9	87	17.6
First Year Teacher Program	30	9.9	9	10.5	14	13.2	16	14.4	8	9.1	18	13.7	7	6.2	4	7.8	53	10.7
In-Service Workshop	53	17.6	18	20.9	26	24.5	29	26.2	11	12.5	23	17.6	28	24.8	6	11.8	97	19.7
SUB TOTAL	302	100.0	86	100.0	106	100.0	111	100.0	88	100.0	131	100.0	113	100.0	51	100.0	494	100.0
WHO TO TEACH:																		
OSU Faculty	85	28.1	25	27.5	24	23.8	31	28.2	33	38.4	27	21.3	29	24.0	14	28.0	134	27.1
OSU Ag Ed Faculty	79	26.2	20	22.0	22	21.8	18	16.4	27	31.4	29	22.8	28	23.1	19	38.0	121	24.5
Specialist, State Staff	50	16.6	16	17.6	22	21.8	26	23.6	9	10.5	26	20.5	24	19.8	3	6.0	88	17.8
Specialist, Industry	34	11.3	8	8.8	8	7.9	13	11.8	5	5.7	14	11.0	16	13.2	2	4.0	50	10.1
Vo Ag Instructor with Expertise	54	17.8	22	24.1	25	24.7	22	20.0	12	14.0	31	24.4	24	19.9	12	24.0	101	20.5
SUB TOTAL	302	100.0	91	100.0	101	100.0	110	100.0	86	100.0	127	100.0	121	100.0	50	100.0	494	100.0
WHERE TO TEACH:																		
OSU Campus	132	48.7	36	43.9	40	37.4	37	37.4	51	62.2	42	35.9	46	41.4	32	62.7	208	45.2
OSU Extension Centers	26	9.6	11	13.4	13	12.1	15	15.2	2	2.4	9	7.7	21	18.9	3	5.9	50	10.9
Vo-Tech Summer Conference	50	18.5	15	18.3	23	21.5	19	19.2	13	15.9	34	29.1	19	17.1	3	5.9	88	19.1
Vo Ag Supervisory Districts	28	10.3	8	9.8	15	14.0	15	15.2	7	8.5	12	10.3	12	10.8	5	9.8	51	11.1
Vo Ag P. I. Meetings	35	12.9	12	14.6	16	15.0	13	13.0	9	11.0	20	17.0	13	11.8	8	15.7	63	13.7
SUB TOTAL	271	100.0	82	100.0	107	100.0	99	100.0	82	100.0	117	100.0	111	100.0	51	100.0	460	100.0

University faculty. A total of 134 responses (27.1 percent) favored these teachers. Receiving 121 responses (24.5 percent), the Oklahoma State University Agricultural Education faculty was named the second most preferred teachers. All but three of the individual groups indicated this same preference. Five separate groups--0 - 10 years experience, Southeast, Southwest, Northeast, and Northwest Districts--by their rates of response designated vocational agriculture teachers with expertise as the third preference for teaching this competence. Overall, these teachers drew 101 (20.5 percent) of the responses. State staff specialists and industry specialists ranked fourth and fifth with 88 (17.8 percent) and 50 (10.1 percent) of the total number of responses respectively. Individual groups' responses and ratings were very close to the overall on both of these latter teacher groups.

Individually and collectively, the groups surveyed indicated their first preference as to the site for teaching this competence was the Oklahoma State University campus. A total of 208 responses (45.2 percent) were tallied for this choice. Receiving 88 responses (19.1 percent), the vocational-technical summer conference was calculated to be the second most preferred location. In six of the eight respondent groups, this location received the second highest number of responses. In third place overall, as indicated by the response rate of 63 (13.7 percent) was vocational agriculture professional improvement meetings. Receiving the fourth highest rate of response, with 51 (11.1 percent), were vocational agriculture supervisory districts. Teachers from the 0 - 10 and 21 plus years experience and Southwest and Central District groups gave this site the fourth highest rate of response. Receiving the least number of responses by the total group and by the 0 - 10, 21

plus years experience, Southwest District and Central District groups were Oklahoma State University extension centers. Only 50 responses (10.9 percent) were in favor of this location.

Conducting Young Farmer and/or Adult Programs

The total group of 352 vocational agriculture teachers were surveyed to determine their preferences regarding the development of competence necessary to conduct a young farmer and/or adult program. Results of this action are presented in summary form in Table XVIII.

With reference to when to teach or develop this competence, the option receiving the highest level of response, 170 (32.5 percent) of the 523 responses, and thus designating it the most favored was Oklahoma State University pre-service program. The next one in line was in-service workshop as determined by the fact it drew 122 (23.3 percent) of the responses and this was followed by Oklahoma State University in-service courses with 93 (17.8 percent). On the last two, there was a tie with each receiving 69 (13.2 percent) responses. This disclosed that during the student teaching experience and first year teaching program were the least desired times to provide for this competence.

Ranking this selection of times in the same order as the overall group, as established by the proportion of responses to each choice, were the following individual groups: 0 - 10 years experience, 11 - 20 years experience, and the Southeast District. The order of preference set by the remaining groups deviated but little from the total group pattern.

Teachers were asked to indicate who they felt should teach this competence. The largest group, 133 (25.0 percent) of the 532 responses, felt that specialist, state staff, should teach it. However, a close

TABLE XVIII

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF CONDUCTING YOUNG FARMER AND/OR ADULT PROGRAM

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
WHEN TO TEACH:																		
OSU Pre-Service	106	32.0	26	29.2	38	36.9	34	30.3	36	40.0	38	28.4	37	27.6	25	47.2	170	32.5
Student Teaching Experience	43	13.0	12	13.5	14	13.6	14	12.5	11	12.2	19	14.2	17	12.7	8	15.1	69	13.2
OSU In-Service Courses	66	19.9	16	18.0	11	10.7	22	19.6	16	17.8	27	20.1	24	17.9	4	7.5	93	17.8
First Year Teacher Program	44	13.3	15	16.9	10	9.7	15	13.4	12	13.3	17	12.7	16	11.9	9	17.0	69	13.2
In-Service Workshop	72	21.8	20	22.4	30	29.1	27	24.2	15	16.7	33	24.6	40	29.9	7	13.2	122	23.3
SUB TOTAL	331	100.0	89	100.0	103	100.0	112	100.0	90	100.0	134	100.0	134	100.0	53	100.0	523	100.0
WHO TO TEACH:																		
OSU Faculty	66	19.7	18	18.7	28	27.7	24	20.9	23	25.6	23	16.7	33	24.3	9	17.0	112	21.0
OSU Ag Ed Faculty	73	21.8	22	22.9	24	23.8	20	17.4	23	25.6	33	23.9	24	17.6	19	35.8	119	22.4
Specialist, State Staff	91	27.2	21	21.9	21	20.8	32	27.8	18	20.0	38	27.5	35	25.7	10	18.9	133	25.0
Specialist, Industry	24	7.2	9	9.4	4	4.0	11	9.6	2	2.2	13	9.4	9	6.6	2	3.8	37	7.0
Vo Ag Instructor with Expertise	81	24.1	26	27.1	24	23.7	28	24.3	24	26.6	31	22.5	35	25.8	13	24.5	131	24.6
SUB TOTAL	335	100.0	96	100.0	101	100.0	115	100.0	90	100.0	138	100.0	136	100.0	53	100.0	532	100.0
WHERE TO TEACH:																		
OSU Campus	113	36.3	28	33.3	35	36.1	27	27.0	42	50.0	39	29.8	36	29.0	32	60.4	176	35.8
OSU Extension Centers	38	12.2	10	11.9	14	14.4	17	17.0	5	6.0	14	10.7	20	16.1	6	11.3	62	12.6
Vo-Tech Summer Conference	59	19.0	19	22.6	24	24.7	26	26.0	9	10.7	34	26.0	27	21.8	6	11.3	102	20.7
Vo Ag Supervisory Districts	42	13.5	10	11.9	7	7.2	13	13.0	14	16.7	16	12.2	15	12.1	1	1.9	59	12.0
Vo Ag P. I. Meetings	59	19.0	17	20.3	17	17.6	17	17.0	14	16.6	28	21.3	26	21.0	8	15.1	93	18.9
SUB TOTAL	311	100.0	84	100.0	97	100.0	100	100.0	84	100.0	131	100.0	124	100.0	53	100.0	492	100.0

second was indicated for the choice of vocational agriculture instructors with expertise, which drew 131 (24.6 percent) of the responses. Receiving the third greatest response was Oklahoma State University Agricultural Education faculty with 119 (22.4 percent). Fourth choice with 112 (21.0 percent) responses was Oklahoma State University faculty. The fifth choice was specialist, industry, as determined by the 37 (7.0 percent) responses it received. The respondent groups individually were generally alike in their patterns of responses. For example, all groups assigned the fewest responses to industry specialists, thus ranking it last on the list. Although the ordering of the preferences varied somewhat, the number and percentage of responses to the groups were close.

With reference to where to teach this competence, the choice receiving the greatest proportion 176 (32.8 percent) of the 492 total responses was the Oklahoma State University campus. Each group assigned the most responses to this choice with the percentage ranging from a high of 60.4 for the Northwest District to a low of 27.0 from the Southeast group. The number two preference for the group overall as determined by its receiving 102 (20.7 percent) of the responses was the vocational-technical summer conference site. This was designated as the second most popular choice by all groups except the Southwest and Northwest Districts. Vocational agriculture teacher professional improvement meetings received the third greatest number of responses 93 (18.9 percent) from the group overall and from each group individually except the 0 - 10 years experience and Northwest District teachers. Oklahoma State University extension centers and within the vocational agriculture supervisory districts received the fourth and fifth largest overall group responses respectively, with each receiving about the same proportion.

Making Use of Local Advisory Committee

Table XIX contains a summary of responses from vocational agriculture teachers regarding preferences for the development of competencies necessary to make use of a local advisory committee.

The overwhelming first preference of all groups regarding when the competence should be taught was during the Oklahoma State University pre-service program. Overall, 175 (39.2 percent) of the respondents favored this time. The second choice by all groups combined, attracting 90 responses (20.2 percent) was during in-service workshop. This was the second choice of all the groups, except the Southwest and Northwest Districts. The last three choices were close, with the third preference overall by virtue of receiving 66 responses (14.8 percent) being the first year teacher program. This was a second choice for the Southwest District. Teachers from the Northwest, Northeast, and Central Districts and those from the 0 - 10 and 11 - 20 years groups listed this their third choice. In fourth place as rated by the total group was the Oklahoma State University in-service courses receiving 59 (13.2 percent) of the responses. Teachers from the Southeast District and 21 plus years experience groups rated this a third place choice. The least preferred time was during the student teaching experience which received 53 (12.6 percent) of the responses. For teachers from the Northwest District, this was a second choice.

Teachers were surveyed as to who they felt should teach this competence. All groups except the 11 - 20 years experience, Central, and Northwest Districts selected as first choice the Oklahoma State University faculty. A total of 126 responses (29.0 percent) favored these

TABLE XIX

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF MAKING USE OF LOCAL ADVISORY COMMITTEE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
WHEN TO TEACH:																		
OSU Pre-Service	114	41.5	28	36.8	33	34.7	31	34.8	38	44.7	37	32.2	47	44.3	22	43.1	175	39.2
Student Teaching Experience	37	13.5	7	9.2	12	12.6	7	7.9	11	12.9	19	16.5	9	8.5	10	19.6	56	12.6
OSU In-Service Courses	34	12.4	8	10.5	17	17.9	15	16.9	11	12.9	16	13.9	13	12.3	4	7.8	59	13.2
First Year Teacher Program	40	14.5	14	18.5	12	12.6	11	12.4	16	18.8	19	16.5	12	11.3	8	15.7	66	14.8
In-Service Workshop	50	18.1	19	25.0	21	22.2	25	28.0	9	10.7	24	20.9	25	23.6	7	13.8	90	20.2
SUB TOTAL	275	100.0	76	100.0	95	100.0	89	100.0	85	100.0	115	100.0	106	100.0	51	100.0	446	100.0
WHO TO TEACH:																		
OSU Faculty	79	29.1	20	25.3	27	31.8	32	35.2	26	31.7	23	21.3	30	29.1	15	29.4	126	29.0
OSU Ag Ed Faculty	63	23.2	19	24.0	24	28.2	18	19.8	21	25.6	27	25.0	23	22.3	17	33.3	106	24.4
Specialist, State Staff	42	15.5	14	17.7	12	14.1	14	15.4	10	12.2	23	21.3	17	16.5	4	7.8	68	15.6
Specialist, Industry	16	5.9	3	3.8	1	1.2	5	5.5	2	2.4	7	6.5	4	3.9	2	3.9	20	4.6
Vo Ag Instructor with Expertise	71	26.3	23	29.2	21	24.7	22	24.1	23	28.1	28	25.9	29	28.2	13	25.6	115	26.4
SUB TOTAL	271	100.0	79	100.0	85	100.0	91	100.0	82	100.0	108	100.0	103	100.0	51	100.0	435	100.0
WHERE TO TEACH:																		
OSU Campus	108	41.4	26	37.1	32	39.5	30	36.6	35	44.9	34	35.0	30	37.5	38	62.3	166	40.3
OSU Extension Centers	20	7.7	11	15.7	11	13.6	13	15.9	7	9.0	9	9.3	8	7.7	5	8.2	42	10.2
Vo-Tech Summer Conference	42	16.1	9	12.9	13	16.0	13	15.8	8	10.3	19	19.6	18	17.3	6	9.8	64	15.5
Vo Ag Supervisory Districts	32	12.3	6	8.6	6	7.4	13	15.9	7	8.9	10	10.3	11	10.6	3	4.9	44	10.7
Vo Ag P. I. Meetings	59	22.5	18	25.7	19	23.5	13	15.8	21	26.9	25	25.8	28	26.9	9	14.8	96	23.5
SUB TOTAL	261	100.0	70	100.0	81	100.0	82	100.0	78	100.0	97	100.0	104	100.0	61	100.0	412	100.0

teachers. Receiving 115 responses (26.4 percent), vocational agriculture teachers with expertise was the second most preferred group of teachers. Teachers from the Central District and 11 - 20 years experience group listed this their first choice. The Oklahoma State University Agricultural Education faculty was named the third most preferred group. Teachers from the Northwest District rated this their first choice. In fourth place as rated by the total group was state staff specialists receiving 68 (15.6 percent) of the responses. In last place as rated by the entire group was industry specialist receiving only 20 (4.6 percent) of the responses.

Individually and collectively, the groups indicated their first preference as to the site for teaching this competence was the Oklahoma State University campus. A total of 166 responses (40.3 percent) were tallied for this choice. Receiving 96 responses (23.3 percent), the vocational agriculture professional improvement meetings was calculated to be the second most preferred location. In seven of the eight respondent groups this location received the second highest number of responses. In third place overall, as indicated by the response rate of 64 (15.5 percent) was vocational-technical education summer conference. Receiving the fourth highest rate of response with 44 (10.7 percent) was the vocational agriculture supervisory districts. Receiving the least number of responses by the total group were Oklahoma State University extension centers. Only 42 responses (10.2 percent) favored this location.

Agricultural Economics

Table XX contains a summary of responses expressing the preferences of 352 vocational agriculture teachers regarding the development of

TABLE XX

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE
AREA OF AGRICULTURAL ECONOMICS

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	166	48.8	39	51.3	43	45.3	46	39.7	55	60.4	49	36.6	58	49.1	40	76.9	248	48.5
Student Teaching Experience	30	8.8	2	2.6	4	4.2	13	11.2	1	1.1	12	8.9	7	5.9	3	5.8	36	7.0
OSU In-Service Courses	49	14.4	15	19.7	20	21.1	20	17.2	13	14.3	22	16.4	24	20.3	5	9.6	84	16.4
First Year Teacher Program	26	7.6	2	2.6	5	5.3	11	9.5	5	5.5	11	8.2	6	5.1	0	0	33	6.5
In-Service Workshop	69	20.4	18	23.8	23	24.1	26	22.4	17	18.7	40	29.9	23	19.6	4	7.7	110	21.6
SUB TOTAL	340	100.0	76	100.0	95	100.0	116	100.0	91	100.0	134	100.0	118	100.0	52	100.0	511	100.0
WHO TO TEACH:																		
OSU Faculty	155	44.8	41	51.2	44	46.3	43	36.8	51	58.0	49	36.6	65	50.0	32	61.5	240	46.1
OSU Ag Ed Faculty	44	12.7	9	11.3	10	10.5	16	13.7	8	9.1	13	9.7	14	10.8	12	23.1	63	12.1
Specialist, State Staff	36	10.4	11	13.7	16	16.8	18	15.4	9	10.2	19	14.2	15	11.5	2	3.8	63	12.1
Specialist, Industry	65	18.8	13	16.2	14	14.7	21	17.9	14	15.9	35	26.1	17	13.1	5	9.7	92	17.7
Vo Ag Instructor with Expertise	46	13.3	6	7.6	11	11.7	19	16.2	6	6.8	18	13.4	19	14.6	1	1.9	63	12.0
SUB TOTAL	346	100.0	80	100.0	95	100.0	117	100.0	88	100.0	134	100.0	130	100.0	52	100.0	521	100.0
WHERE TO TEACH:																		
OSU Campus	155	47.8	38	50.0	43	47.8	39	35.1	53	63.9	44	37.0	62	49.2	38	74.5	236	48.2
OSU Extension Centers	50	15.4	11	14.5	17	18.9	23	20.7	10	12.0	19	16.0	18	14.3	8	15.7	78	15.9
Vo-Tech Summer Conference	66	20.4	20	26.3	15	16.7	25	22.5	9	10.8	36	30.2	30	23.8	1	2.0	101	20.6
Vo Ag Supervisory Districts	23	7.1	1	1.3	10	11.1	14	12.6	5	6.0	7	5.9	8	6.3	0	0	34	6.9
Vo Ag P. I. Meetings	30	9.3	6	7.9	5	5.5	10	9.1	6	7.3	13	10.9	8	6.4	4	7.8	41	8.4
SUB TOTAL	324	100.0	76	100.0	90	100.0	111	100.0	83	100.0	119	100.0	126	100.0	51	100.0	490	100.0

competence necessary to teach agricultural economics.

The overwhelming first preference of all groups regarding when the competence should be taught was during the Oklahoma State University pre-service program. Overall, 248 (48.5 percent) of the respondents favored this time. The second choice by all groups combined, attracting 110 (21.6 percent), of the responses was during in-service workshops. This was the second choice of the Northeast and Northwest Districts. All of the other years experience groups and districts concurred with the third rating. In fourth place as rated by the total group was the student teaching experience, receiving 36 (7.0 percent) of the responses. The least preferred time was during a first year teacher program which received only 33 (6.5 percent) of the responses. Individual groups' ratings for the last two times to teach were consistently low.

Teachers were surveyed as to who they felt should teach this competence. All groups were unanimous in selecting the Oklahoma State University faculty as first choice. A total of 240 responses (46.1 percent) favored these teachers. Receiving 92 responses (17.7 percent), industry specialist was named the second most preferred. All but two of the individual groups indicated this same preference. In third place overall, as indicated by the response rate of 63 (12.1 percent) was a three way tie for Oklahoma State University Agricultural Education faculty, state staff specialist, and vocational agriculture instructors with expertise.

Individually and collectively, the groups surveyed indicated their first preference as to the site for teaching this competence was the Oklahoma State University campus. A total of 236 responses (48.2 percent) were tallied for this choice. Receiving 101 responses (20.6

percent) the vocational-technical summer conference was calculated to be the second most preferred location. In five of the eight respondent groups, this location received the second highest number of responses. In third place overall, as indicated by the response rate of 78 (15.9 percent) was Oklahoma State University extension centers. Receiving the fourth highest rate of responses with 41 (8.4 percent) was vocational agriculture professional improvement meetings. In six of the eight respondent groups, this location received the fourth highest number of responses. Receiving the least number of responses by six of the respondent groups was vocational agriculture supervisory districts. The Southeast District and 21 plus years experience groups placed this site fourth. However, overall only 34 responses (6.9 percent) were in favor of this location which placed it last.

Agronomy and/or Plant Science

In order to determine the preference of 352 teachers regarding when, where, and by whom the competence required in the area of agronomy should be taught, Table XXI was developed.

The overwhelming first preference of all groups regarding when the competence should be taught was during the Oklahoma State University pre-service program. Overall, 237 (47.1 percent) of the respondents favored this time. The second choice by all groups combined, attracting 115 (22.8 percent) of the responses was during in-service workshops. This was second choice of seven of the eight groups. It was the Northwest District's fourth choice. The third preference overall as indicated by the 86 (17.1 percent) responses was Oklahoma State University in-service courses. All eight groups made this their third choice. In fourth place

TABLE XXI

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE AREA OF AGRONOMY AND/OR PLANT SCIENCE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.		N	%
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%		
WHEN TO TEACH:																		
OSU Pre-Service	153	47.8	37	44.0	40	43.5	34	35.1	56	60.2	51	37.2	58	46.8	38	73.1	237	47.1
Student Teaching Experience	23	7.2	6	7.1	6	6.5	8	8.2	3	3.2	13	9.5	5	4.0	6	11.5	35	7.0
OSU In-Service Courses	52	16.2	19	22.6	15	16.3	19	19.6	14	15.1	25	18.2	24	19.4	4	7.7	86	17.1
First Year Teacher Program	24	7.5	3	3.6	3	3.3	11	11.3	4	4.3	9	6.6	5	4.0	1	1.9	30	6.0
In-Service Workshop	68	21.3	19	22.7	28	30.4	25	25.8	16	17.2	39	28.5	32	25.8	3	5.8	115	22.8
SUB TOTAL	320	100.0	84	100.0	92	100.0	97	100.0	93	100.0	137	100.0	124	100.0	52	100.0	503	100.0
WHO TO TEACH:																		
OSU Faculty	145	44.8	39	50.0	44	46.3	34	36.2	53	60.9	53	38.7	55	43.3	33	63.5	228	45.9
OSU Ag Ed Faculty	33	10.2	7	9.0	7	7.4	10	10.6	7	8.1	11	8.0	9	7.1	10	19.2	47	9.5
Specialist, State Staff	38	11.7	12	15.4	16	16.8	15	16.0	5	5.7	21	15.3	20	15.7	5	9.7	66	13.3
Specialist, Industry	71	21.9	10	12.8	20	21.1	21	22.3	15	17.2	38	27.7	25	19.7	2	3.8	101	20.3
Vo Ag Instructor with Expertise	37	11.4	10	12.8	8	8.4	14	14.9	7	8.1	14	10.3	18	14.2	2	3.8	55	11.0
SUB TOTAL	324	100.0	78	100.0	95	100.0	94	100.0	87	100.0	137	100.0	127	100.0	52	100.0	497	100.0
WHERE TO TEACH:																		
OSU Campus	152	46.9	34	43.0	45	46.9	38	37.6	53	63.9	45	34.6	56	42.4	39	73.6	231	46.3
OSU Extension Centers	46	14.2	12	15.2	16	16.7	17	16.8	10	12.0	20	15.4	19	14.4	8	15.1	74	14.8
Vo-Tech Summer Conference	68	21.0	21	26.6	25	26.0	27	26.8	9	10.8	44	33.8	32	24.2	2	3.8	114	22.8
Vo Ag Supervisory Districts	27	8.3	4	5.1	5	5.2	12	11.9	5	6.0	9	6.9	10	7.6	0	0	36	7.3
Vo Ag P. I. Meetings	31	9.6	8	10.2	5	5.2	7	6.9	6	7.3	12	9.3	15	11.4	4	7.5	44	8.8
SUB TOTAL	324	100.0	79	100.0	96	100.0	101	100.0	83	100.0	130	100.0	132	100.0	53	100.0	499	100.0

as rated by the total group was the student teaching experience, receiving 35 (7.0 percent) of the responses. The least preferred time was during a first year teacher program which received only 30 (6.0 percent) of the responses. Individual groups rating this time last were the 11 - 20 and 21 plus experience groups and those from the Central and Northwest Districts.

Teachers were surveyed as to who they felt should teach this competence. All groups specified as first choice the Oklahoma State University faculty. A total of 228 responses (45.9 percent) favored these teachers. Receiving 101 responses (20.3 percent), industry specialists were named the second most preferred teachers. All but two of the individual groups indicated this same preference. In seven of the eight respondent groups state staff specialist was named the third most preferred teacher group, receiving 66 (13.3 percent) of the responses. Vocational agriculture instructors with expertise and Oklahoma State University Agricultural Education faculty ranked fourth and fifth with 55 (11.0 percent) and 47 (9.5 percent) of the total number of responses respectively.

The overwhelming first preference of all groups surveyed indicated their first preference as to the site for teaching this competence was the Oklahoma State University campus. A total of 231 responses (46.3 percent) were tallied for this choice. Receiving 114 responses (22.8 percent), the vocational-technical summer conference was calculated to be the second most preferred location. In six of the eight respondent groups, this location received the second highest number of responses. All eight respondent groups indicated their third choice by the response rate of 74 (14.8 percent) to be Oklahoma State University extension

centers. Vocational agriculture professional improvement meetings and vocational agriculture supervisory districts were ranked fourth and fifth with 44 (8.8 percent) and 36 (7.3 percent) of the total number of responses respectively.

Animal Science

Table XXII contains a summary of the preferences of 352 vocational agriculture teachers regarding when, where, and by whom the competence required in the area of animal science should be taught.

The overwhelming first preference of all groups regarding when the competence should be taught was during Oklahoma State University pre-service program. Overall, 259 (44.3 percent) of the responses favored this time. The second choice by all groups combined, attracting 131 (22.5 percent) of the responses was during in-service workshops. This was the second choice of seven of the eight respondent groups. Teachers from the Northeast District preferred this to be their third choice. The third preference overall as indicated by the 108 responses (18.5 percent) was Oklahoma State University in-service courses. Concurring with this rating were seven of the eight respondent groups. It was rated second by teachers of the Northeast District. First year teacher program and student teaching experience were ranked fourth and fifth with 45 (7.7 percent) and 41 (7.0 percent) of the total number of responses, respectively.

Teachers were surveyed as to who they felt should teach this competence. The first preference of all groups was the Oklahoma State University faculty. Overall, 237 (41.0 percent) favored these teachers. Receiving 119 responses (20.6 percent), industry specialists was named

TABLE XXII

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE AREA OF ANIMAL SCIENCE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	166	45.1	43	45.7	50	41.0	47	36.2	55	53.9	48	29.4	66	48.2	43	82.7	259	44.3
Student Teaching Experience	29	7.9	2	2.1	10	8.2	11	8.5	5	4.9	17	10.4	7	5.1	1	1.9	41	7.0
OSU In-Service Courses	65	17.7	20	21.3	23	18.8	28	21.5	13	12.7	35	21.5	29	21.2	3	5.8	108	18.5
First Year Teacher Program	30	8.2	6	6.4	9	7.4	13	10.0	6	5.9	18	11.0	8	5.8	0	0	45	7.7
In-Service Workshop	78	21.1	23	24.5	30	24.6	31	23.8	23	22.6	45	27.7	27	19.7	5	9.6	131	22.5
SUB TOTAL	368	100.0	94	100.0	122	100.0	130	100.0	102	100.0	163	100.0	137	100.0	52	100.0	584	100.0
WHO TO TEACH:																		
OSU Faculty	145	38.3	40	42.6	52	49.5	40	32.3	50	49.0	50	33.3	63	42.0	34	65.4	237	41.0
OSU Ag Ed Faculty	41	10.8	6	6.4	5	4.8	14	11.3	6	5.9	13	8.7	10	6.7	9	17.3	52	9.0
Specialist, State Staff	50	13.2	14	14.9	18	17.1	22	17.7	14	13.7	22	14.7	23	15.3	1	1.9	82	14.2
Specialist, Industry	83	21.9	18	19.1	18	17.1	29	23.4	20	19.6	37	24.7	30	20.0	3	5.9	119	20.6
Vo Ag Instructor with Expertise	60	15.8	16	17.0	12	11.5	19	15.3	12	11.8	28	18.6	24	16.0	5	9.7	88	15.2
SUB TOTAL	379	100.0	94	100.0	105	100.0	124	100.0	102	100.0	150	100.0	150	100.0	52	100.0	578	100.0
WHERE TO TEACH:																		
OSU Campus	157	43.4	33	36.3	48	47.1	42	35.6	52	54.7	45	31.9	64	43.3	34	66.7	238	42.9
OSU Extension Centers	45	12.4	14	15.4	14	13.7	19	16.1	7	7.4	20	14.2	20	13.3	7	13.7	73	13.2
Vo-Tech Summer Conference	81	22.4	24	26.4	24	23.5	29	24.6	16	16.8	47	33.3	35	23.3	2	3.9	129	23.2
Vo Ag Supervisory Districts	38	10.5	8	8.8	6	5.9	16	13.6	10	10.5	12	8.5	12	8.0	2	3.9	52	9.4
Vo Ag P. I. Meetings	41	11.3	12	13.1	10	9.8	12	10.1	10	10.6	17	12.1	18	12.1	6	11.8	63	11.3
SUB TOTAL	362	100.0	91	100.0	102	100.0	118	100.0	95	100.0	141	100.0	150	100.0	51	100.0	555	100.0

the second most preferred group of teachers. All but one of the individual groups indicated this same preference. Five separate groups-- 0 - 10 and 11 - 20 years experience groups, Central, Northeast, and Northwest Districts--by their rates of responses designated vocational agriculture teachers with expertise as the third preference for teaching this competence. Overall, these teachers drew 88 (15.2 percent) of the responses. Seven of the eight respondents ranked state staff specialists as their fourth preference for teaching this competence. Overall these teachers drew 82 (14.2 percent) of the responses. Oklahoma State University Agricultural Education faculty was fifth with 52 (9.0 percent) of the responses.

Teachers were surveyed to determine where they felt this competence should be taught. All groups except the Central District teachers specified their first choice as the Oklahoma State University campus. A total of 238 responses (42.9 percent) favored this site. Receiving 119 responses (20.6 percent) the vocational-technical summer conference was calculated to be the second most preferred location. In seven of the eight respondent groups, this location received the second highest number of responses. In third place overall, as indicated by the response rate of 73 (13.2 percent) was Oklahoma State University extension centers. Receiving the fourth highest rate of responses with 63 (11.3 percent) was vocational agriculture professional improvement meetings. Teachers from the three years experience groups and Central and Northeast Districts gave this site the fourth highest rate of response. Receiving the least number of responses by the total groups and by seven of the eight respondent groups was vocational agriculture supervisory districts. Only 52 responses (9.4 percent) favored this location.

Mechanized Agriculture

Teachers attending Mid-Winter Conference were asked to indicate their preferences regarding when, where, and by whom the competence in the area of mechanized agriculture should be taught. Table XXIII was developed to present a summary of their responses.

The first preference of all groups regarding when the competence should be taught was during the Oklahoma State University pre-service program. Overall, 252 (45.5 percent) of the responses favored this time. The second choice by all groups combined, attracting 137 (24.7 percent) of the responses was during in-service workshops. In seven of the eight respondent groups, the teachers preferred this time as their second choice. Teachers from the Southeast District preferred this as their third choice. The third preference overall as determined by the 88 responses (15.9 percent) was Oklahoma State University in-service courses. Concurring with this rating were all three experience groups and the Southwest, Central, Northeast, and Northwest Districts. Student teacher experience and first year teacher program were ranked fourth and fifth because of the 41 (7.4 percent) and 36 (6.5 percent) responses respectively assigned.

Teachers were surveyed as to who they felt should teach this competence. In all groups, the Oklahoma State University faculty drew the greatest level of response with 224 (40.0 percent) of the responses favoring these teachers. Receiving 135 responses (24.2 percent) was industry specialist, the second most preferred by the teachers. Seven of the eight respondent groups indicated this same preference. The Northwest District teachers preferred this for their third selection.

TABLE XXIII

SUMMARY OF RESPONSES AS TO WHEN TO TEACH, WHO SHOULD TEACH, WHERE TO TEACH COMPETENCE IN THE AREA OF MECHANIZED AGRICULTURE

Comparison Factor	Distribution by Years Experience						Distribution by Districts										State Total	
	0 - 10		11 - 20		21 +		S.E.		S.W.		C.		N.E.		N.W.			
	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
WHEN TO TEACH:																		
OSU Pre-Service	163	47.5	40	40.8	49	42.6	43	36.1	57	56.4	51	33.3	59	45.0	42	80.8	252	45.5
Student Teaching Experience	25	7.3	8	8.2	8	7.0	11	9.2	3	3.0	15	9.8	11	8.4	1	1.9	41	7.4
OSU In-Service Courses	52	15.2	19	19.4	17	14.8	28	23.5	11	10.9	30	19.6	17	13.0	2	3.8	88	15.9
First Year Teacher Program	22	6.4	8	8.2	6	5.2	10	8.4	5	5.0	13	8.5	6	4.6	2	3.8	36	6.5
In-Service Workshop	81	23.6	23	23.4	35	30.4	27	22.8	25	24.7	44	28.8	38	29.0	5	9.7	137	24.7
SUB TOTAL	343	100.0	98	100.0	115	100.0	119	100.0	101	100.0	153	100.0	131	100.0	52	100.0	554	100.0
WHO TO TEACH:																		
OSU Faculty	142	40.3	39	39.8	43	39.1	39	31.7	55	56.7	47	31.1	52	38.2	31	58.5	224	40.0
OSU Ag Ed Faculty	35	9.9	9	9.2	10	9.1	10	8.1	5	5.2	16	10.6	10	7.4	13	24.5	54	9.6
Specialist, State Staff	41	11.6	13	13.3	15	13.6	22	17.9	9	9.3	18	11.9	19	14.0	1	1.9	69	12.3
Specialist, Industry	83	23.6	21	21.4	31	28.2	31	25.2	19	19.6	47	31.1	33	24.3	5	9.4	135	24.2
Vo Ag Instructor with Expertise	51	14.6	16	16.3	11	10.0	21	17.1	9	9.2	23	15.3	22	16.1	3	5.7	78	13.9
SUB TOTAL	352	100.0	98	100.0	110	100.0	123	100.0	97	100.0	151	100.0	136	100.0	53	100.0	560	100.0
WHERE TO TEACH:																		
OSU Campus	153	43.8	34	35.8	42	42.4	40	33.1	53	58.2	43	30.9	58	42.6	35	62.5	229	42.2
OSU Extension Centers	45	12.9	20	21.1	11	11.1	19	15.7	13	14.3	15	10.8	19	14.0	10	17.9	76	14.0
Vo-Tech Summer Conference	72	20.6	18	18.9	23	23.2	29	24.0	12	13.2	42	30.2	28	20.6	2	3.6	113	20.8
Vo Ag Supervisory Districts	35	10.0	11	11.6	9	9.1	16	13.2	6	6.6	17	12.3	14	10.3	2	3.6	55	10.1
Vo Ag P. I. Meetings	44	12.7	12	12.6	14	14.2	17	14.0	7	7.7	22	15.8	17	12.5	7	12.4	70	12.9
SUB TOTAL	349	100.0	95	100.0	99	100.0	121	100.0	91	100.0	139	100.0	136	100.0	56	100.0	543	100.0

Four separate groups--0 - 10 and 11 - 20 and the Central and Northeast Districts--by their rates of responses designated vocational agriculture teachers with expertise as the third preference for teaching this competence. Overall, these teachers drew 78 (13.9 percent) of the responses. State staff specialist and Oklahoma State University Agricultural Education faculty ranked fourth and fifth with 69 (12.3 percent) and 54 (9.6 percent) of the total number of responses, respectively.

All groups surveyed indicated their first preference as to the site for teaching this competence was the Oklahoma State University campus. A total of 229 responses (42.2 percent) were tallied for this choice. Receiving 113 responses (20.8 percent) the vocational-technical summer conference was calculated to be the second most preferred location. In six of the eight respondent groups this location received the second highest number of responses. The Southwest and Northwest Districts did not prefer this for their second choice. In third place overall, as indicated by the response rate of 76 (14.0 percent) was Oklahoma State University extension centers. The 0 - 10 years experience group and the Southeast and Northeast Districts concurred with this. Receiving the fourth highest rate of response with 70 (12.9 percent) were vocational agriculture professional improvement meetings. Teachers from the 0 - 10 and 11 - 20 years experience and the Southeast, Southwest, Central, and Northeast Districts gave this site the fourth highest rate of response. Receiving the least number of responses by the total group and by seven of the eight respondent groups was vocational agriculture supervisory districts. Only 55 responses (10.1 percent) were in favor of this location.

Teacher Perception and Opinions of Specific
Questions as Summarized by Distribution
of Respondents

Table XXIV was formulated to summarize responses regarding feelings about a formalized new teacher training program in Oklahoma. The respondents were grouped by years of experience within each district and the "Yes" and "No" responses for each group were tallied. The response pattern indicated that 323 (94.7 percent) of the 341 responses were favorable, while 18 (5.3 percent) voiced a "No" for such a program.

As can be determined by inspecting the data in Table XXIV, the "Yes" responses of younger teachers in the 0 - 10 years experience groups accounted for more than 58 percent of the total number of responses to this proposal. It is noteworthy that the 11 - 20 years experience group was totally in favor of this type program. The remaining eight negative opinions came from the most experienced group of teachers.

The 352 Oklahoma vocational agriculture teachers surveyed expressed their feelings about whether or not 1 1/2 day training sessions at the vocational agriculture summer conference would be preferred. Table XXV was designed to present a summary of these responses. The respondents were grouped by years of experience within each district and the "Yes" and "No" responses for each group were tallied. The response pattern indicated that 273 (92.0 percent) of the 297 responses were "Yes" while 24 (8.0 percent) were "No."

A breakdown of data in Table XXV confirms the "Yes" responses by younger teachers in the 0 - 10 years experience groups accounted for more than 54 percent of the total number of responses to this proposal.

TABLE XXIV

TEACHER OPINIONS REGARDING ESTABLISHMENT OF A NEW TEACHER TRAINING PROGRAM IN
OKLAHOMA AS SUMMARIZED BY EXPERIENCE AND DISTRICT GROUPS

Years Experience Groups		Distribution by Districts																				State Total		
		Yes Responses										No Responses												
		S.E. N	%	S.W. N	%	C. N	%	N.E. N	%	N.W. N	%	Total N	%	S.E. N	%	S.W. N	%	C. N	%	N.E. N	%			N.W. N
0 - 10	37	10.9	40	11.7	39	11.4	51	15.0	31	9.1	198	58.1	0	0	3	0.9	4	1.2	1	0.3	2	0.6	10	2.9
11 - 20	10	2.9	12	3.5	10	2.9	14	4.1	12	3.5	58	17.0	0	0	0	0	0	0	0	0	0	0	0	0
21 +	16	4.7	12	3.5	18	5.3	13	3.8	8	2.3	67	19.6	2	0.6	1	0.3	2	0.6	3	0.9	0	0	8	2.4
Total	63	18.5	64	18.7	67	19.6	78	22.9	51	14.9	323	94.7	2	0.6	4	1.2	6	1.8	4	1.2	2	0.6	18	5.3

Note: Total N = 341

TABLE XXV

TEACHER OPINIONS OF 1 1/2 DAY TRAINING SESSIONS AT SUMMER CONFERENCE AS
SUMMARIZED BY EXPERIENCE AND DISTRICT GROUPS

Years Experience Groups		Distribution by Districts																						State Total %	
		Yes Responses												No Responses											
		S.E.		S.W.		C.		N.E.		N.W.		Total		S.E.		S.W.		C.		N.E.		N.W.			
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%
0 - 10	35	11.8	26	8.8	33	11.0	48	16.2	19	6.4	161	54.2	0	0	7	2.4	1	0.3	2	0.7	5	1.7	15	5.1	
11 - 20	9	3.0	11	3.7	10	3.4	13	4.4	9	3.0	52	17.5	1	0.3	1	0.3	0	0	1	0.3	1	0.3	4	1.2	
21 +	13	4.4	9	3.0	19	6.4	12	4.1	7	2.4	60	20.3	2	0.7	2	0.7	0	0	1	0.3	0	0	5	1.7	
Total	57	19.2	46	15.5	62	20.8	73	24.7	35	11.8	273	92.0	3	1.0	10	3.4	1	0.3	4	1.3	6	2.0	24	8.0	

Note: Total N = 297

This same group expressed 15 (5.1 percent) of the "No" responses. Teachers in the 11 - 20 and 21 plus experience groups highly favored 1 1/2 day training sessions at summer conference. They provided only 4 (1.2 percent) and 5 (7.1 percent) of the "No" responses, respectively.

Table XXVI was formulated to summarize responses from 352 vocational agriculture teachers regarding their feelings about a combination 1 1/2 day training session plus short session type program for vocational agriculture summer conference. The response pattern indicated that 287 (87.2 percent) of the 329 responses were favorable, while 42 (12.8 percent) voted "No" for such a program.

As can be determined by inspecting the data in Table XXVI, the positive responses of young teachers in the 0 - 10 year experience group accounted for more than 54 percent of the total number of responses to this proposal. This same group accounted for 25 (7.5 percent) of the negative opinions. Teachers in the 11 - 20 and 21 plus experience groups highly favored 1 1/2 day training sessions plus short session type programs at summer conference. They cast only 7 (2.1 percent) and 19 (3.8 percent) of the "No" responses respectively. It is noteworthy that young teachers in the 0 - 10 years experience group from the Northeast and Northwest Districts supplied 16 of the 25 "No" responses.

In an effort to assess teacher feelings about summer conferences patterned after the 1974 vocational agriculture teachers' summer conferences, the total group of teacher responses were compiled in tabular form and are presented in Table XXVI. It was determined that 296 (89.9 percent) of the 329 responses were favorable, while 33 (10.1 percent) were against such a summer conference program.

As can be determined by inspecting the data in Table XXVII, the

TABLE XXVI

TEACHER OPINIONS OF A COMBINATION OF 1 1/2 DAY AND SHORT SESSIONS AT SUMMER CONFERENCE
AS SUMMARIZED BY EXPERIENCE AND DISTRICT GROUPS

<u>Distribution by Districts</u>																								
Years Experience Groups	<u>Yes Responses</u>												<u>No Responses</u>											
	S.E. N	%	S.W. N	%	C. N	%	N.E. N	%	N.W. N	%	Total N	%	S.E. N	%	S.W. N	%	C. N	%	N.E. N	%	N.W. N	%	State Total N	%
0 - 10	33	10.0	37	11.2	41	12.5	44	13.4	24	7.3	179	54.4	4	1.2	5	1.5	0	0	8	2.4	8	2.4	25	7.5
11 - 20	9	2.7	9	2.7	9	2.7	14	4.3	8	2.4	49	14.8	1	0.3	1	0.3	1	0.3	0	0	4	1.2	7	2.1
21 +	13	4.0	11	3.3	19	5.8	10	3.0	6	1.8	59	17.9	2	0.7	2	0.7	1	0.3	3	0.9	2	0.7	10	3.3
Total	55	16.7	57	17.2	69	21.0	68	20.7	38	11.5	287	87.1	7	2.2	7	2.5	2	0.6	11	3.3	14	4.3	42	12.9

Note: Total N = 329

TABLE XXVII
TEACHER PREFERENCES FOR 1974 SUMMER CONFERENCE FORMAT AS
SUMMARIZED BY EXPERIENCE AND DISTRICT GROUPS

Years Experience Groups	Distribution by Districts																							
	Yes Responses												No Responses										State Total	
	S.E.		S.W.		C.		N.E.		N.W.		Total		S.E.		S.W.		C.		N.E.		N.W.			
N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	N	%	
0 - 10	28	8.5	40	12.2	38	11.6	46	14.0	30	9.1	182	55.4	1	0.3	3	0.9	5	1.5	12	3.6	2	0.7	23	7.0
11 - 20	6	1.8	11	3.3	10	3.0	13	4.0	12	3.6	52	15.7	1	0.3	1	0.3	0	0	1	0.3	0	0	3	0.9
21 +	12	3.6	11	3.3	18	5.5	13	4.0	8	2.4	62	18.8	1	0.3	1	0.3	3	0.9	2	0.7	0	0	7	2.2
Total	46	13.9	62	18.8	66	20.1	72	22.0	50	15.1	296	89.9	3	0.9	5	1.5	8	2.4	15	4.6	2	0.7	33	10.1

Note: Total N = 329

"Yes" responses of younger teachers in the 0 - 10 year experience group accounted for more than 55 percent of the total number of responses to this type program. This same group provided 23 (7.0 percent) of the "No" responses. More than half of these responses were by teachers from the Northeast District. It was noteworthy that the 11 - 20 years experience group had less than 1 percent opposed to the 1974 summer conference. The older experienced teachers had only 7 (2.2 percent) of the responses opposing this question.

Selected Comments from Teachers In-Service

Training Summer Conference First

Year Teacher Program

An open-ended section was included on the questionnaire and was intended to evoke additional responses for items not covered. Some of the responses are covered in the following selected comments. There were as follows:

1. Make more use of specialists in the field where training is given.
2. The summer conference college credit type is an outstanding type of innovative teacher training for in-service teachers. There is a need for training in these areas for state and national contests.
3. The most training I have received--the best training I have received for teaching in the field I teach now. I learned in my P. I. group from specialist and other good teachers. All subjects need to be practical, up-to-date.
4. It's O.K!
5. More skills taught by teachers that are doing a good job teaching

it in their schools.

6. More in-service training on P. I. level.

7. A lot of practical work. Half day sessions like 1974 in areas we deal with all the time.

8. If an A.I. and pregnancy testing course were offered, you would get a great turn out.

9. This last conference was sure a step in the right direction. Those instructors willing to share the results of their experience have saved us from stumbling for solutions to little problems, such as the best coat dressing, methods of blocking a lamb, fitting and showing. We just need more of this attitude of sharing.

10. Teach vo-ag department organization from the bottom up.

11. I like very much the idea for 1 1/2 day sessions at summer conference.

12. In-service training should offer topics or subjects that are relative to the average vo-ag teacher and will help him do a better job.

13. More practical sessions in all phases of agriculture.

14. Short courses are needed in all areas of instruction to refresh and inform vo-ag instructors.

15. I was in a one year new teacher training program in Kansas, and it was real helpful for filling out state reports and helping with problems a first year teacher might have.

16. In-service training should have the primary aim of helping vo-ag teachers solve problems in their home communities. These should be taught by teachers who have expertise in these different areas.

17. I would like to see the student teachers oriented to the Oklahoma FFA Alumni and its many related activities in the state and its

relations with the national organization.

18. Expand fairs, shows, grooming in college courses.

19. I feel the greatest help should be given the first year teacher to help him off on the right foot.

20. I believe new teachers learn most of their teaching competence from other, older, and more experienced teachers in their own P. I. groups.

21. More in-service training in more locations across the state.

22. 1974 summer conference was good for in-service training.

23. Use successful business people in as many areas as possible.

Example, stocker cattle buyer.

CHAPTER V

SUMMARY, CONCLUSIONS, AND RECOMMENDATIONS

The purpose of this chapter is to present a summary review of the study problem and its setting, the design and conduct of the study, and the major findings. Also presented are conclusions and recommendations which are based upon analysis and summarization of data collected and upon observation and impressions resulting from the design and conduct of the study.

Summary of the Study

Purpose of the Study

The primary purpose of this study was to establish how Oklahoma vocational agriculture teachers perceive their degrees of competence within selected areas of their program; when, where, and by whom these competencies should be developed; and the priority of each for teacher training programs in the future.

Specific Objectives of the Study

The following specific objectives were formulated to accomplish the major purpose of the study:

1. To determine the degree of competence vocational agriculture teachers felt they possessed in the areas of:
 - a. Organization and management of vocational agriculture

departments.

- b. Vocational agriculture supervised project program.
- c. FFA chapter advisement.
- d. FFA fairs, shows, and contests.
- e. Vocational agriculture occupational training.
- f. Conducting young farmer and/or adult program.
- g. Making use of local advisory committee.
- h. Agricultural economics.
- i. Agronomy and/or plant science.
- j. Animal science.
- k. Mechanized agriculture

2. To determine the priority of competency as assigned by the teacher.

3. To determine when the training should be provided within the program as perceived by the teacher.

4. To determine the instructors the teachers would prefer to conduct the training offered.

5. To determine where the training programs should be held.

6. To determine if the teachers felt a need for a first year in-service training program for new vocational agriculture teachers.

7. To determine the type of training sessions to be offered at summer conference.

Rationale for the Study

In setting up teacher education programs, the joint staffs of teacher education and state supervisory staff in vocational agriculture are seeking ways to include meaningful in-service training in the special

interest groups at the annual summer conference and for improved training programs for the remainder of the year.

Design and Conduct of the Study

Following a review of research and literature related to the problem, the major tasks involved in the design and conduct of the study were (1) selecting the study population, (2) developing an instrument for data collection, (3) collecting data, and (4) analyzing the findings.

The study population consisted of all certified vocational agriculture teachers with a contract to teach vocational agriculture in a secondary public high school in Oklahoma in 1974-75. The total population was 408 vocational agriculture teachers. There were 352 (86.3 percent of the total possible) usable questionnaires completed for the investigator on January 3, 1975, during the annual Mid-Winter Conference for Vocational Agriculture Teachers.

Findings of the Study

As stated previously, the major focus of the research effort was to assess teachers' perceptions of their level of competence in selected areas of the program and the priority of each for additional training. Teachers were also surveyed to determine when, by whom, and where the development of competence in each area should take place. The findings of the study in regard to these major concerns are offered in both tabular and narrative summaries in the following sections.

Levels of Competence and Training Priority. Table XXVIII was developed to provide a concise summary of the levels of competence teachers perceived they had and the priority of training they assigned to each

TABLE XXVIII

OVERALL SUMMARY OF TEACHER PERCEPTIONS OF COMPETENCE IN SELECTED AREAS AND PRIORITY
OF THESE AREAS FOR TEACHER EDUCATION PROGRAMS

Program Area	Competence			Priority		
	\bar{x} Re- sponse	\bar{x} Competence Level Possessed	Rank	\bar{x} Re- sponse	\bar{x} Priority Level Possessed	Rank
1. Org. and mgt. of vo-ag department	2.26	Average	3	2.61	High	6.0
2. Vo-ag supervised project program	2.22	Average	4	2.69	High	4.5
3. FFA chapter advisor	2.18	Average	5	2.69	High	4.5
4. FFA fairs, shows, and contests	2.37	Average	1	2.88	High	2.0
5. VAOT	1.74	Average	10	2.38	Medium	10.0
6. Conduct YF and/or adult program	1.89	Average	9	2.48	Medium	9.0
7. Making use of local advis. comm.	1.70	Average	11	2.00	Medium	11.0
8. Agricultural economics	1.94	Average	8	2.58	High	7.0
9. Agronomy and/or plant science	2.02	Average	7	2.51	High	8.0
10. Animal science	2.31	Average	2	2.94	High	1.0
11. Mechanized agriculture	2.15	Average	6	2.70	High	3.0

of 11 selected areas of the vocational agriculture program investigated. As indicated in the table, teachers perceived their highest level of competence to be in the area of FFA fairs, shows, and contests. The mean response of the total group was found to be 2.37, which, according to the limits set on the response categories for this study, translated to an average level of competence. In fact, for all areas, teachers' mean responses indicated they had average degrees of competence. The second highest level of competence was perceived by teachers in the area of animal science, which received a 2.31 mean response. By receiving a 2.26 mean response, the organization and management of a vocational agriculture department was found to be the area in which teachers felt they had the third highest level of competence. The remaining areas of the program, arranged in order according to the perceived level of competence assigned by teachers are as follows: vocational agriculture supervised project program (2.22), FFA chapter advisement (2.18), mechanized agriculture (2.15), agronomy and/or plant science (2.02), agricultural economics (1.94), conduct of young and/or adult farmer programs (1.89), vocational agriculture occupational training (1.74), and finally making use of advisory committee (1.70).

The area in which teachers felt they had the greatest need for additional training was animal science. By assignment of a 2.94 mean response, teachers labeled this a high priority area. Others receiving this level of priority rating and their accompanying mean responses in order were: FFA fairs, shows, and contests (2.88); mechanized agriculture (2.70); vocational agriculture supervised project programs and FFA chapter advisement (2.69 each); organization and management of a vocational agriculture department (2.61); agricultural economics (2.58); and

agronomy and/or plant science (2.51). Adjudged to be of medium priority was the development of additional competence in conducting young and/or adult farmer programs (2.48), vocational agriculture occupational training (2.38), and making use of local advisory committees (2.00). A surprising finding illustrated in Table XXVIII was how closely the competence and priority rankings compared. In many cases the two rankings were the same.

When, by Whom, Where Competencies Should Be Developed. In an effort to summarize teacher preferences as to the time, persons, and location for development of competence in six of the 11 areas under investigation, Table XXIX was developed. For all the areas except FFA fairs, shows, and contests, the time most preferred by teachers was during the pre-service program. In-service was listed as the preferred time to teach the area of FFA fairs, shows, and contests. The second most popular time preferred by teachers in the six areas are as follows: first year teacher program, organization and management of vocational agriculture departments and vocational agriculture supervised project program; Oklahoma State University pre-service, FFA fairs, shows, and contests; in-service workshops, FFA chapter advisement, vocational agriculture occupational training, conducting young farmer and/or adult program.

Oklahoma State University Agricultural Education faculty members were the ones selected to teach organization and management of vocational agriculture departments. Vocational agriculture teachers with expertise was the first choice to teach the areas of vocational agriculture supervised project program, FFA chapter advisement, and FFA fairs, shows, and contests. Oklahoma State University faculty members were selected by the teachers to teach vocational agriculture occupational training. The

TABLE XXIX

OVERALL SUMMARY OF VOCATIONAL AGRICULTURE TEACHER PREFERENCES REGARDING WHEN, BY WHOM, AND WHERE
SIX SELECTED AREAS OF THE PROGRAM SHOULD BE TAUGHT

Comparison Factor	Comparison by Program Area																	
	Org-Mgt.			Sup. Proj. Prog.			FFA Adv.			Fairs, Shows			VAOT			Y-F, Adult		
	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank
WHEN TO TEACH:																		
OSU Pre-Service	226	42.6	1	188	35.5	1	181	35.0	1	145	24.4	2.0	196	39.7	1	170	32.5	1.0
Student Teaching Experience	89	16.8	3	73	13.8	5	83	16.1	4	90	15.8	4.0	61	12.3	4	69	13.2	4.5
OSU In-Service Courses	63	11.8	4	80	15.1	4	74	14.3	5	92	16.1	3.0	87	17.6	3	93	17.8	3.0
First Year Teacher Program	106	20.0	2	101	19.1	2	85	16.4	3	84	14.8	5.0	53	10.7	5	60	13.2	4.5
In-Service Workshop	47	8.8	5	87	16.5	3	94	18.3	2	159	27.9	1.0	97	19.7	2	122	23.3	2.0
WHO TO TEACH:																		
OSU Faculty	131	25.6	3	93	18.5	4	106	20.9	3	101	17.8	2.0	134	27.1	1	112	21.0	4.0
OSU AGED Faculty	153	29.9	1	142	28.2	2	134	26.4	2	64	11.3	4.5	121	24.5	2	119	22.4	3.0
Specialist, State Staff	70	13.7	4	100	19.9	3	74	14.6	4	85	15.0	3.0	88	17.8	4	133	25.0	1.0
Specialist, Industry	12	2.3	5	14	2.8	5	14	2.8	5	64	11.3	4.5	50	10.1	5	37	7.0	5.0
Vo-Ag Instructor with Expertise	145	28.5	2	154	30.6	1	179	35.3	1	254	44.6	1.0	101	20.5	3	131	24.6	2.0
WHERE TO TEACH:																		
OSU Campus	226	47.8	1	187	39.8	1	181	37.9	1	142	26.0	2.0	208	45.2	1	176	35.8	1.0
OSU Extension Centers	47	9.9	5	35	7.4	5	42	8.8	5	57	10.4	5.0	50	10.9	5	62	12.6	4.0
Vo-Tech Summer Conference	73	15.4	3	70	14.9	3	87	18.2	3	143	26.4	1.0	88	19.1	2	102	20.7	2.0
Vo-Ag Supervisory District	51	10.8	4	62	13.2	4	60	12.6	4	84	15.3	4.0	51	11.1	4	59	12.0	5.0
Vo-Ag P. I. Meeting	76	16.1	2	116	24.7	2	108	22.5	2	122	22.2	3.0	63	13.7	3	93	18.9	3.0

TABLE XXX

OVERALL SUMMARY OF VOCATIONAL AGRICULTURE TEACHER PREFERENCES REGARDING WHEN, BY WHOM, AND WHERE
FIVE SELECTED AREAS OF THE PROGRAM SHOULD BE TAUGHT

Comparison Factor	<u>Comparison by Program Area</u>														
	Adv. Comm.			Ag. Ec.			Agron.			An. Sci.			Mec. Ag.		
	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank	N	%	Rank
WHEN TO TEACH:															
OSU Pre-Service	175	39.2	1	248	48.5	1.0	237	47.1	1	259	44.3	1	252	45.5	1.0
Student Teaching Experience	56	12.6	5	36	7.0	4.0	35	7.0	4	41	7.0	5	41	7.4	5.0
OSU In-Service Courses	59	13.2	4	84	16.4	3.0	86	17.1	3	108	18.5	3	88	15.9	4.0
First Year Teacher Program	66	14.8	3	33	6.5	5.0	30	6.0	5	45	7.7	4	136	24.7	2.5
In-Service Workshop	90	20.2	2	110	21.6	2.0	115	22.8	2	131	22.5	2	137	24.7	2.5
WHO TO TEACH:															
OSU Faculty	126	29.0	1	246	46.1	1.0	248	45.9	1	237	41.0	1	224	40.0	1.0
OSU AGED Faculty	106	24.4	3	63	12.1	3.5	47	9.5	5	52	9.0	5	54	9.6	5.0
Specialist, State Staff	68	15.6	4	63	12.1	3.5	66	13.3	3	82	14.2	4	69	12.3	4.0
Specialist, Industry	20	4.6	5	92	17.7	2.0	101	20.3	2	119	20.6	2	135	24.2	2.0
Vo-Ag Instructor with Expertise	115	26.4	2	63	12.0	5.0	55	11.0	4	88	15.2	3	78	13.9	3.0
WHERE TO TEACH:															
OSU Campus	166	40.3	1	236	48.2	1.0	231	46.3	1	238	42.9	1	229	42.2	1.0
OSU Extension Centers	42	10.2	5	78	15.9	3.0	74	14.8	3	73	13.2	3	76	14.0	3.0
Vo-Tech Summer Conference	65	15.5	3	101	20.6	2.0	114	22.8	2	129	23.2	2	113	20.8	2.0
Vo-Ag Supervisory District	44	10.7	4	34	6.9	5.0	36	7.3	5	52	9.4	5	55	10.1	5.0
Vo-Ag P. I. Meeting	96	23.3	2	41	8.4	4.0	44	8.8	4	63	11.4	4	70	12.9	4.0

time preferred by teachers in the five areas are as follows: making use of local advisory committees, agricultural economics, agronomy and/or plant science, and animal science. A tie between first year teacher program and in-service workshop was noted for the time to teach mechanized agriculture.

Oklahoma State University faculty members were selected by the teachers to teach all five areas. Vocational agriculture instructors with expertise were selected as the teachers' second choice to teach making use of local advisory committees. Specialist, industry, was the second choice to teach agricultural economics, agronomy and/or plant science, animal science, and mechanized agriculture.

For all the areas, the place most preferred by teachers was on the Oklahoma State University campus. The second preferred place to teach the five competency areas as indicated by the teachers are as follows: the vocational agricultural professional improvement meeting was selected for making use of local advisory committee. Oklahoma State University campus was selected for agricultural economics, agronomy and/or plant science, animal science, and mechanized agriculture.

It is noteworthy to mention teachers selected ten of the 11 competency areas when to teach and where to teach the same first choice. The eleventh competence area they preferred as their second choice.

Teacher Perception and Opinions of Specific Questions. Table XXXI was developed to summarize teacher perceived opinions of four specific questions which have a direct bearing on vocational agriculture teacher education in Oklahoma. As indicated in the table, teachers strongly favored each question. New teacher training program received the highest number 321 (94.7 percent) favorable votes, while only 18 (5.3 percent)

TABLE XXXI

OVERALL SUMMARY OF VOCATIONAL AGRICULTURE TEACHER RESPONSES TO
QUESTIONS REGARDING FORMAT FOR IN-SERVICE TRAINING

Questions	<u>Total</u> N	N	<u>Yes</u> %	N	<u>No</u> %
Do you think a 1st year new teacher training program would be helpful in Oklahoma?	341	323	94.7	18	5.3
Would you recommend 1 1/2 day training sessions at summer conference, example A. I.?	297	273	92.0	24	8.0
Would you recommend a combination 1 1/2 day offering and the short session type (optional)?	329	287	87.2	42	12.8
Do you prefer summer conferences patterned after the 1974 conference?	329	296	90.0	33	10.0

were negative. One and one-half day training sessions at summer conference were approved by the teachers when 273 (92.0 percent) agreed and only 24 (8.0 percent) disagreed. A combination 1 1/2 day offering and the short course type program for summer conference received approval by 287 (87.2 percent) of the teachers, while 42 (12.8 percent) disapproved. Summer conference patterned after the 1974 summer conference was approved by 296 (90.0 percent) of the teachers, while 33 (10.0 percent) disapproved.

Vocational agriculture teachers' opinions on these four questions were very significant to this study.

Overall Summary Pertaining to Eleven Competency Areas for Pre- and In-Service Teacher Education Training Programs in Vocational Agriculture.

Table XXXII was developed to provide a one page pre- and in-service teacher education planning guide for 11 vocational agriculture teaching areas in Oklahoma. This concise summary indicates teachers felt they possessed an average level of competence in all 11 competency areas.

The teachers listed a high priority need for training in the following eight areas: organization and management of vocational agriculture departments, vocational agriculture supervised project program, FFA chapter advisement, FFA fairs, shows, and contests, agricultural economics, agronomy and/or plant science, animal science, and mechanized agriculture. They indicated medium priority for the remaining three areas of vocational agriculture occupational training, conducting young farmer and/or adult programs, and making use of local advisory committees.

Teachers assigned ten of the 11 competency areas to Oklahoma State University pre-service as the time to teach. In only one areas, FFA fairs, shows, and contests, did the teachers indicate the time should be

TABLE XXXII

OVERALL SUMMARY OF DATA PERTAINING TO ELEVEN VOCATIONAL AGRICULTURE TEACHING AREAS BY COMPETENCE LEVEL, PRIORITY, WHEN, BY WHOM, AND WHERE TO TEACH PRE- AND IN-SERVICE AGRICULTURAL EDUCATION PROGRAMS

Vocational Agriculture Teaching Area	Level of Competence	Priority For In- Service	Preference For When To Teach		Who To Teach	Where To Teach
			1st	2nd		
1. Organization & management	Average	High	Pre- Service	1st year Teacher	OSU Aged Faculty	OSU Campus
2. Supervised project	Average	High	Pre- Service	1st year Teacher	Vo-Ag Instr./ w. Expertise	OSU Campus
3. FFA chapter advisement	Average	High	Pre- Service	In- Service	Vo-Ag Instr./ w. Expertise	OSU Campus
4. Fairs, shows, & contests	Average	High	In- Service	Pre- Service	Vo-Ag Instr./ w. Expertise	Vo-Tech Summer Conference
5. VAOT	Average	Medium	Pre- Service	In- Service	OSU Faculty	OSU Campus
6. Young farmer or adult	Average	Medium	Pre- Service	In- Service	Specialist, State Staff	OSU Campus
7. Local advisory committee	Average	Medium	Pre- Service	In- Service	OSU Faculty	OSU Campus

TABLE XXXII (CONTINUED)

Vocational Agriculture Teaching Area	Level of Competence	Priority For In- Service	Preference For When To Teach		Who To Teach	Where To Teach
			1st	2nd		
8. Agricultural economics	Average	High	Pre- Service	In- Service	OSU Faculty	OSU Campus
9. Agr. and/or plant science	Average	High	Pre- Service	In- Service	OSU Faculty	OSU Campus
10. Animal science	Average	High	Pre- Service	In- Service	OSU Faculty	OSU Campus
11. Mechanized agriculture	Average	High	Pre- Service	In- Service	OSU Faculty	OSU Campus

in-service workshops.

As indicated in the table, the teachers picked the Oklahoma State University Agricultural Education faculty to teach organization and management of vocational agriculture departments. Vocational agriculture instructors with expertise was the teachers' first choice to teach these three competency areas which were vocational agriculture supervised project programs, FFA chapter advisement, and FFA fairs, shows, and contests. Oklahoma State University faculty was favored by the teachers to teach six competency areas listed in the following order: vocational agriculture occupational training, making use of local advisory committee, agricultural economics, agronomy and/or plant science, animal science, and mechanized agriculture. It is significant to note teachers preferred state staff specialists to teach conducting young farmer and/or adult programs.

Teachers assigned Oklahoma State University campus as the place to teach ten of the 11 competencies. The eleventh, FFA fairs, shows, and contests, was selected to be taught at the vocational-technical education summer conference held each summer on the Oklahoma State University campus.

Conclusions

Inspection and interpretation of the study findings prompted the formulation of certain conclusions by the investigator as detailed below.

1. Vocational agriculture teachers consider themselves to possess adequate levels of competence in all areas investigated but have a genuine interest in and need for more training in each area.

2. Teachers in all age groups and within all districts are quite

similar in the manner in which they perceive their skill levels and training needs.

3. A desire was expressed for departure from traditional patterns of teacher education to include the teaching of certain skills and competencies by people other than teacher educators. In other words, there was a desire to involve more people in the professional improvement process.

4. Higher competence areas were also assigned higher priority for more training indicating teachers recognize the need for constant and additional professional improvement in those areas which comprise the major portion of their programs.

5. Teachers preferred that most all competence development take place at the pre-service level; however, this does not preclude the necessity of providing viable in-service programs.

6. Teachers feel that teacher education efforts are best conducted by the faculty and in the facilities of Oklahoma State University.

7. A formalized program of assistance for new and returning teachers would add a new dimension to current teacher education efforts and is needed.

8. The annual summer conference following the format used the past two years is an effective means of improving teachers' levels of competence and is type preferred by teachers.

Recommendations

On the basis of the analysis of data obtained in this study and comments made by vocational agriculture teachers, former teachers, vocational agriculture state staff members, agricultural education faculty

members, certain general recommendations and recommendations for additional research were developed.

General Recommendations

1. Teacher education programs should continue to place major emphasis on preparing teachers for four year programs of vocational agriculture at the secondary level designed to train young people for the business of farming and ranching and which have integrated programs of instruction based on production, management, and related skills and which provide supervised occupational experience.

2. The in-service component of teacher education should become increasingly important by providing on-campus or off-campus programs in both professional and technical areas. This should help the teachers improve their own skills and prepare them for the many different kinds of jobs and different occupations they are confronted with.

3. Increased emphasis must be placed on developing teacher's competence for helping those who have left the formal school setting--young farmers, adult farmers, and those who are employed as workers in or entrepreneurs of agriculturally related business.

4. Vocational agriculture state staff members, agricultural education staff members, and vocational agriculture teachers should coordinate their efforts and cooperate together to develop a pre-service and in-service program to emphasize competency based training which is modern, and relevant to the needs of the local vocational agriculture teacher.

Special Recommendations

1. It is recommended that the pre-service training for vocational

agriculture undergraduate students be competency training which includes knowledge of those skills needed to train students at the secondary level. Skills that motivate and help students determine and develop their needs, likes, interests, values, personality traits, and leadership abilities and offer those students guidance and supervision in occupational and career development.

2. It is recommended that the pre-service training for vocational agriculture undergraduate students include more training in technical agriculture subjects with more of the training applied to competency skill training.

3. It is recommended that the pre-service training for vocational agriculture undergraduate students include more training in vocational agriculture occupational training.

4. It is recommended that the pre-service training for vocational agriculture undergraduate students emphasize a need for young farmer and/or adult training.

5. It is recommended that teacher education programs for vocational agriculture teachers emphasize the need for an organized local advisory committee and how to work with such a group.

6. It is recommended that the Board of Vocational-Technical Education appropriate additional funds to be used for a first year vocational agriculture teacher training program to be administered by the Vocational Agriculture State staff and the Oklahoma State University Agricultural Education staff. This program should compliment the pre-service training, build on the competencies the teacher has learned, offer new competency in-service training to help the local teacher establish himself in his local community and gain confidence needed to be a successful teacher.

Experienced vocational agriculture instructors with expertise in a particular competency should be used as needed.

7. It is recommended that immediate consideration be given by the State Board of Vocational-Technical Education to appropriating additional funds to be used to employ vocational agriculture teachers with expertise in particular areas on a part-time basis to work with their fellow vocational agriculture teacher in efforts to raise their level of competence.

8. It is recommended that in-service training in technical agriculture competency areas be offered on-campus and off-campus, utilizing Oklahoma State University faculty members and specialists from industry.

9. It is recommended that the annual summer conference for vocational agriculture teachers in the future be patterned after the 1974-75 summer conference. Programs in the future should include 1 1/2 day training sessions. In-service competency training should include both professional and technical agriculture.

Additional Research

It is recommended by the author that a study be made among the vocational agriculture teachers to determine an exact priority arrangement of the various program areas for inclusion in pre-service, first year teacher, and continuing in-service training programs.

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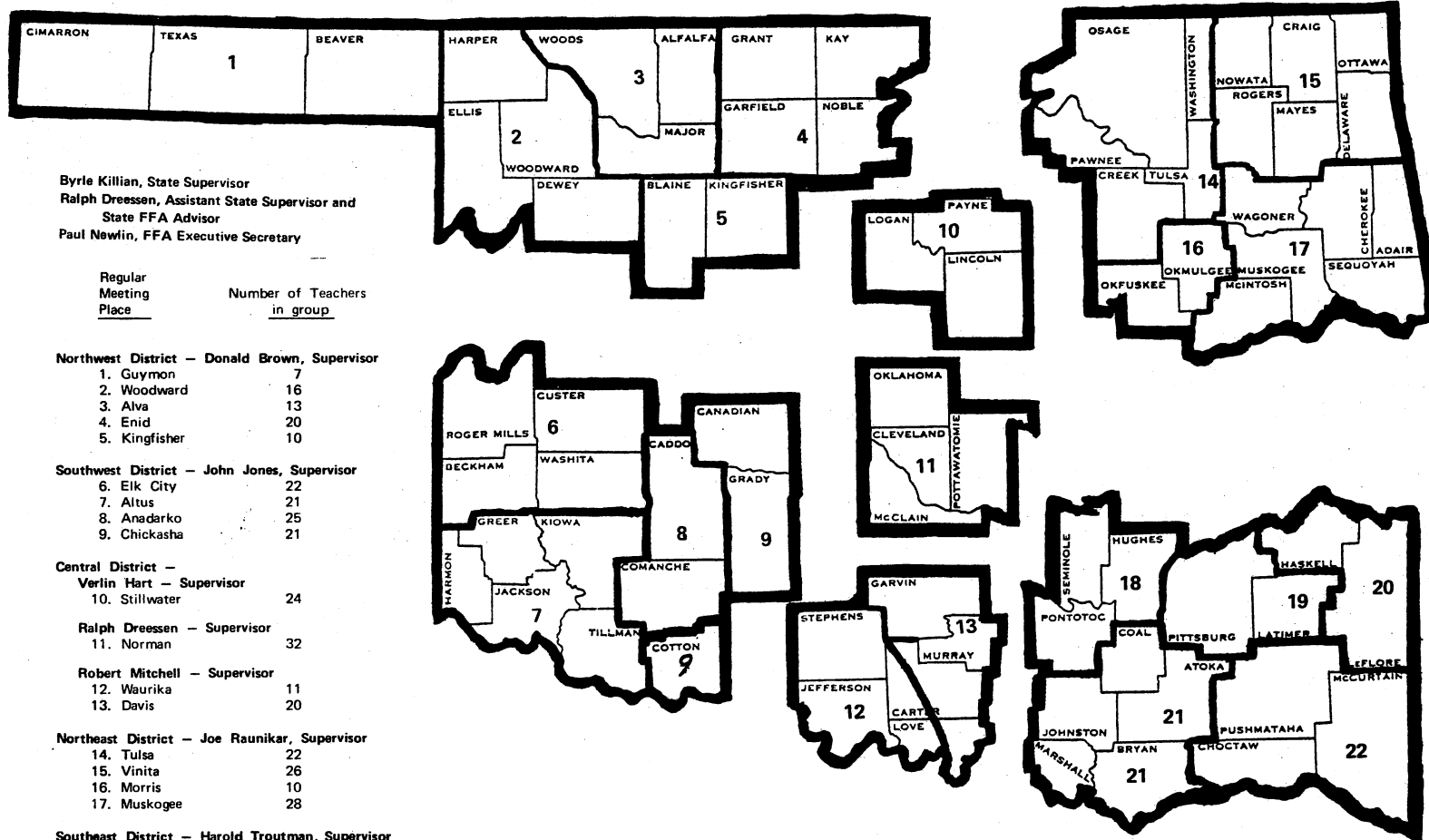
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APPENDIX A

OKLAHOMA VOCATIONAL AGRICULTURE TEACHERS'
DISTRICTS AND PROFESSIONAL
IMPROVEMENT GROUPS

OKLAHOMA VOCATIONAL AGRICULTURE TEACHERS' DISTRICTS AND PROFESSIONAL IMPROVEMENT GROUPS



APPENDIX B

QUESTIONNAIRE

[illegible]

VITA

John Dudley Jones

Candidate for the Degree of

Doctor of Education

Thesis: VOCATIONAL AGRICULTURE TEACHER PERCEPTIONS OF COMPETENCIES AS BASES FOR PRE- AND IN-SERVICE AGRICULTURAL EDUCATION PROGRAMS IN OKLAHOMA

Major Field: Agricultural Education

Biographical:

Personal Data: Born near Lone Wolf, Oklahoma, July 2, 1917, the son of John and Ora Jones.

Education: Attended grade school in Alfalfa, Marietta, Lone Grove, New Liberty, Delhi, Oklahoma. Attended high school in Stonewall and Bokchito, Oklahoma; graduated from Bokchito High School in 1937; received the Bachelor of Science degree from Oklahoma State University, with a major in Agricultural Education in the spring of 1948. Completed requirements for the Master of Science degree in Agricultural Education at Oklahoma State University in July, 1967; engaged in post-graduate study at Oklahoma State University, Stillwater, Oklahoma, from September, 1967 to December, 1975; completed requirements for the Doctor of Education degree at Oklahoma State University, Stillwater, Oklahoma, in December, 1975.

Professional Experience: Active duty in Oklahoma 45th National Guard Division, 1939-1942; active duty in U. S. Army Air Forces 1942-1945; vocational agriculture teacher, Elgin, Oklahoma, 1948-1967. Graduate teaching assistant, Agricultural Education Department, Oklahoma State University from September, 1974 to July, 1975; Vocational Agriculture District Supervisor, Vocational and Technical Education Department, Stillwater, Oklahoma, 1967-1975.

Professional Organizations: Member of Oklahoma Vocational Agriculture Teachers Association; Oklahoma Vocational Association; Honorary State Farmer, Oklahoma Future Farmers of America; National Vocational Agriculture Teachers Association; Honorary American Farmer, National Future Farmers of America; American Vocational Association; Oklahoma Education Association;

National Education Association; Vocational Education Administrators Association; National Association Supervisors of Agricultural Education; State FFA Alumni Association; National FFA Alumni Association; Alph Tau Alpha; and Phi Delta Kappa.

Leadership Activities: President, Oklahoma Vocational Agriculture Teachers Association; Vice-President, Agriculture Division, Oklahoma Vocational Association; Secretary, Agricultural Education District Supervisors, Southern Region; Twenty-Five Year Distinguished Service Award; Chairman, Oklahoma Future Farmers of America People to People Tour of Europe; member of First United Methodist Church, Stillwater, Oklahoma.