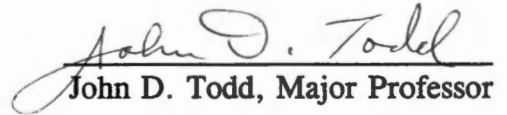
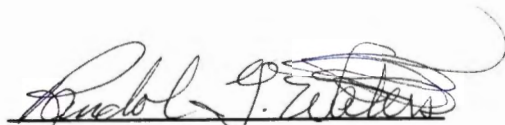


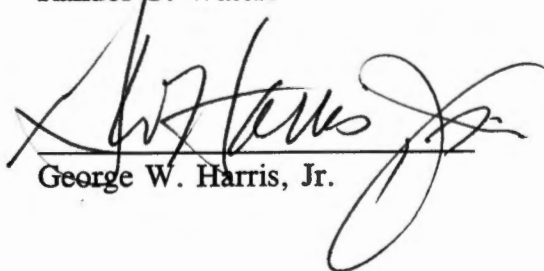
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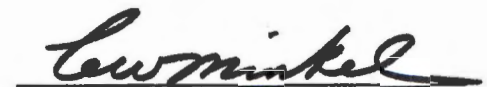

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Attitudes and Perceptions of Tennessee Agricultural
Education Teachers Regarding Various Aspects of
Supervised Agricultural Experience Programs

A Thesis

Presented for the

Master of Science

Degree

The University of Tennessee, Knoxville

Kirk A. Swartzel

May 1994

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ABSTRACT

The purpose of the study was to describe the attitudes and philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs. The study also identified the demographics of Tennessee agricultural education teachers and what factors influenced their philosophies about various aspects of supervised agricultural experience programs.

A questionnaire was developed to meet the research questions of the study. Data gathered for the study were analyzed using The University of Tennessee Computing Center IBM 3081 mainframe computer and the Statistical Package for the Social Sciences (SPSS) release 4.1. Descriptive statistics and appropriate inferential tests were used in the analysis.

Findings

1. Agricultural education teachers who taught in multiple teacher departments had a more positive philosophy regarding the importance of supervised agricultural experience programs and planning activities for supervised agricultural experience programs.
2. Agricultural education teachers who subscribed to The Agricultural Education Magazine had a more positive philosophy regarding the importance of supervised agricultural experience programs and planning activities for supervised agricultural experience programs.
3. Agricultural education teachers had a more positive philosophy regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs when they counted their students' supervised agricultural experience programs as part of their grade in agricultural education.

4. Agricultural education teachers had a more positive philosophy regarding the importance of supervised agricultural experience programs and supervision strategies used with supervised agricultural experience programs when they had a class period during the school day to leave and supervise students' supervised agricultural experience programs.
5. Agricultural education teachers who did not enroll in agricultural education courses while high school students had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs.

Implications

1. If economically feasible, local school systems offering agricultural education courses should consider having multiple teacher agricultural education departments.
2. Agricultural education teachers should be scheduled a class period during the school day to leave and supervise students' supervised agricultural experience programs.
3. Agricultural education teachers should consider counting their students' supervised agricultural experience programs as part of their grade in agricultural education. Prospective agricultural education teachers should be encouraged by teacher educators to count students' supervised agricultural experience programs as part of their grade in agricultural education.
4. Agricultural education teachers should consider subscribing to The Agricultural Education Magazine to keep up-to-date about changes with supervised agricultural experience programs. Prospective agricultural education teachers should be encouraged by teacher educators to subscribe to The Agricultural Education Magazine.
5. Teacher educators should continue to teach prospective agricultural education teachers about supervised agricultural experience programs.

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CHAPTER I

INTRODUCTION AND PROBLEM

Need for the Study

Concepts of having supervised experience programs in agriculture have been in the profession for a long time. Supervised experiences in agriculture first began as home projects. Rufus Stimson encouraged his students to have home projects as a form of supervised experiences in agriculture while serving as director of an agricultural school in Massachusetts. Students enrolled in the agricultural school came to class everyday with problems or concerns they had with farming situations at home. Stimson (cited in Boone, Doerfert, and Elliot, 1987) wanted students to focus their attention sharply on home farming problems and their solutions, based on well-studied programs of work and management (p. 58).

Federal legislative acts were then passed to support these concepts of having supervised experience programs in agriculture. The Smith-Hughes Act of 1917 was the first legislative act that provided language which required students to have "directed supervised practices in agriculture" in which skills learned in the classroom were to be applied in a real life situation (Phipps and Osborne, 1988: p. 550). More specifically,

"...the controlling purpose of such education shall be to fit for useful employment; that such education shall be less than college grade and be designated to meet the needs of persons over fourteen years of age who have entered upon or who are preparing to enter upon the work of the farm or of the farm home...that such schools shall provide for directed or supervised farm practice in agriculture, either on a farm provided for by the school or other farm, for at least six months per year." (Phipps and Osborne, 1988: p. 550).

Students were to be conducting supervised farming programs in order to prepare them to become farmers.

Agriculture then began to change. New technologies were developed. Farming operations and agriculture in general began to include more business-oriented activities. To meet changes occurring in agriculture, the concept of placement for agricultural experiences was developed. The Vocational Education Act of 1963 was passed to strengthen and improve the quality of vocational education and to expand vocational education opportunities in the nation (Phipps and Osborne, 1988: p. 16). This Act stated that funds were to:

"...be used for vocational education in any occupation involving knowledge and skills in agricultural subjects, whether or not such occupation involves work on the farm or of the farm home; and such education may be provided without directed or supervised practice on the farm" (Moore, 1979: p. 219).

The language of the Vocational Education Act of 1963 indicated that students were to be trained for all occupations in agriculture, not just farming operations. Less emphasis was to be placed on the farming options and more emphasis on placement options. Supervised farming projects became supervised occupational experience projects because students were being trained for specific occupations in agriculture.

The passage of this Act started the decline of supervised experience programs in agriculture (Moore, 1979: p. 219). Teachers, teacher educators, and state supervisors started putting less emphasis on students having supervised experience programs because changes were occurring in agriculture. The intent of this Act was to create more opportunities for off-farm supervised experience programs, not to eliminate them.

In 1988, the National Research Council Committee on Agricultural Education in Secondary Schools reported on directions agricultural education should take in the future. In terms of supervised experience programs, the Committee recognized values of supervised experience and recommended that all students participate in worthwhile supervised experience programs (Committee on Agricultural Education in Secondary Schools, 1988). The Committee also indicated and emphasized that these programs should include experiences in land laboratories, agricultural mechanics laboratories, school greenhouses, nurseries, and other facilities (Barrick, Hughes, and Baker, 1991).

With the Committee's recommendations, new directions for supervised experience programs in agriculture were developed. Agricultural educators should have seen these new directions coming. Fewer and fewer students in agricultural education were coming from traditional farming programs. Boone, Doerfert, and Elliot (1987) stated that "in the future, the majority of students enrolled in vocational agriculture will have limited farming backgrounds and agriculture will continue to become more technical, specialized, business-oriented, and efficient" (p. 61).

In 1989, the National Summit on Agricultural Education took place in St. Louis, Missouri. Leaders participating in the Summit examined the role of agricultural education in supplying a trained work force for the dynamic agricultural industry. Participants at the Summit stated as its final charge that "Change is rampant in agriculture, and agricultural education must keep pace or become an obsolete remnant of the past" (The Strategic Plan for Agricultural Education, 1990: p. 1).

With student populations changing, changes in types of supervised experience

programs being conducted by students started to change also. In Missouri, Stewart and Birkenholz (1991) studied the changing types of supervised experience programs conducted by Missouri agricultural education students. In 1982-83, beef production and swine production programs were conducted by nearly 57 percent of the students enrolled in agricultural education. Thirty-three percent of the students were in placement programs in production or agribusiness. Five years later, 56 percent of the student were conducting placement programs in agribusiness and production while 41 percent were conducting programs in beef or swine production. Between 1982-83 and 1987-88, students completing only ownership programs dropped from 66 percent to 44 percent. During that same time period, the number of students participating "only in placement" programs increased from 21 percent to 35 percent.

There are many reasons why these changes have occurred. Agricultural jobs have become more technical and specialized, thus requiring more advanced and intensive training. Fewer students are coming from farms or lack a sufficient agricultural background. More limited opportunity and special needs students are enrolling in agricultural education courses than ever before. Students trying to conduct supervised experience programs today may not have necessary or adequate resources to conduct quality supervised experience programs. Costs of acquiring land, equipment, livestock, supplies, or financing have become prohibitive for students (Experiencing Agriculture, 1992). Increased graduation requirements have limited student access to agricultural education courses.

These changes have brought about an expansion for purposes of the profession

(Experiencing Agriculture, 1992). Students must be prepared for many new occupations in agriculture available to them. Agricultural education has expanded to encompass instruction about any agriculture nature whether it be general, academic, or occupational. Supervised experiences in agriculture must change also along with these changes in our mission.

Changes in agricultural education have also brought about changes in kinds and types of courses being offered to high school students. Schools are not offering as many basic production courses in agricultural education today as in past years. Agricultural education has become more specialized regarding the kinds of courses being offered. Many states are offering courses in agriscience, teaching scientific principles using agricultural examples. Some states like Tennessee, Texas, and Virginia have developed semester courses for specific areas in agriculture. Some examples of course titles are Leadership Development, Small Engines, Interior and Exterior Landscaping, Introduction to World Agriscience and Technology, and Agribusiness Management. These courses are more specific and tailored to certain career areas in agriculture.

With the change to specialized semester courses in agricultural education, supervised agricultural experience programs have become more innovative. Students are conducting more supervised agricultural experience projects in school agricultural mechanics laboratories and greenhouses. Students are even developing entrepreneurship projects like lawn mowing services to gain agricultural experience. Exploratory supervised agricultural experience projects are being conducted by students with very limited opportunities. These projects allow students to explore a variety of agricultural

subjects and careers in agriculture. Such projects may include studying hydroponics, water quality, and biotechnology in agriculture.

Statement of the Problem

Changing from traditional programs of agricultural education to more innovative and specialized programs has had an influence on supervised agricultural experience programs. These new programs are attracting more students, especially nontraditional students, into agricultural education. The offering of more specialized semester courses and the enrollment of more nontraditional students in agricultural education create a concern in our profession regarding what skills and abilities students of agricultural education should have for new and different careers in agriculture upon completion of these courses. Since more specialized semester courses of agricultural education will be offered in the future and this will affect supervised experiences of students enrolling in these courses, the problem can be stated: What are the attitudes and philosophies of Tennessee agricultural education teachers regarding various aspects of supervised agricultural experience programs for all students enrolled in agricultural education course?

Purpose of the Study

The purpose of the study was to describe the attitudes and philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs for all students enrolled in agricultural education courses.

Agricultural education no longer consists only of traditional production oriented courses. Agricultural education is more specialized, not only in content, but in types of students enrolling in these courses. More and more students, especially nontraditional agriculture students, are enrolling in specialized semester courses in agricultural education. Under these conditions, it has become critical to develop guidelines pertaining to supervised agricultural experience for these students.

Research Questions

The researcher identified the following research questions to guide the study.

They were:

1. What were the demographic characteristics of agricultural education teachers in Tennessee?
2. What were the philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs for students?
3. What were the philosophies of Tennessee agricultural education teachers regarding planning activities for supervised agricultural experience programs?
4. What were the philosophies of Tennessee agricultural education teachers regarding supervision strategies used with supervised agricultural experience programs?
5. What relationships existed between Tennessee agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs and agricultural education teacher demographic characteristics?
6. What relationships existed between Tennessee agricultural education teacher philosophies regarding planning activities for supervised agricultural experience programs and agricultural education teacher demographic characteristics?

7. What relationships existed between Tennessee agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs and agricultural education teacher demographic characteristics?

Limitations

This study was limited to agricultural education teachers in the state of Tennessee. Because the researcher did not want to include any new or first year teachers in Tennessee, agricultural education teachers selected for the study had at least one year of agricultural education teaching experience in Tennessee.

Operational Definitions

The following terms were used in the study:

1. **Agribusiness** refers to the full scale of operations related to the business of agriculture.
2. **Agricultural Education** refers to the curriculum or program designed to offer students at the secondary level the opportunity to explore and prepare for agricultural occupations.
3. **Agriculture** refers to the broad industry engaged in the production of plants and animals for food and fiber, the provision of agricultural supplies and services, and the processing, marketing, and distribution of agricultural products.
4. **Agriscience** refers to the application of scientific principles and new technologies to agriculture.
5. **Placement Programs** refer to the types of supervised agricultural experiences in which students work for others on a farm or other agricultural business, in school laboratories beyond the regular class time or in communities for pay or only for experience.

6. **Supervised Agricultural Experience Program** refers to the specific learning experiences that are planned and conducted by an individual student that contributes to the development of agricultural and personal skills. These programs are conducted by students outside of class and laboratory instruction or on school-released time. Supervision is provided by teachers, parents, employers, and others. (Literature before 1990 refers to Supervised Occupational Experience Programs. Literature beginning in 1990 refers to Supervised Agricultural Experience Programs.)
7. **Supervision** refers to monitoring, instructing and evaluating students and their Supervised Agricultural Experience Programs. It may include making supervisory visits, conducting on-site supervision, and providing on-site instruction.

CHAPTER II

REVIEW OF RELATED LITERATURE

This chapter is divided into six sections. The first section discusses values and benefits of conducting supervised agricultural experience programs. Section two discusses relationships of supervised experience programs to student achievement in agriculture. The roles of teachers in supervised agricultural experience are discussed in the third section. Section four describes problems in conducting supervised agricultural experience programs. The fifth section discusses semester courses in agricultural education. The final section is a summary of literature reviewed for the study.

Values and Benefits of Conducting Supervised Agricultural Experience Programs

Supervised agricultural experience programs benefit students, teachers, employers, agricultural education programs, communities and businesses in the agricultural industry. The primary benefit of having supervised agricultural experience programs is to learn by doing and apply agricultural knowledge and skills learned in the classroom, and laboratory in an "away from the classroom" setting (Experiencing Agriculture, 1992). Phipps and Osborne (1988) stated that "supervised occupational experience programs 'bridge the gap' between classrooms and work places by providing students opportunities for application and transfer" (p. 313).

Phipps and Osborne (1988) identified seventeen values of supervised occupational experience programs. Supervised occupational experience programs:

1. Provide an opportunity for the development of abilities needed for proficiency in agriculture
2. Provide an avenue to satisfactory, progressive establishment in agricultural occupations
3. Provide an opportunity to earn, save, and use money
4. Provide a desirable type of motivation and develops students' interest in agriculture
5. Develop students' originality, pride of ownership, initiative, self-confidence, and managerial ability
6. Provide opportunities for contributing to desirable family living
7. Develop desirable habits, understandings, appreciations, ideals, abilities, and attitudes through challenging true-to-life situations
8. Provide opportunities for students to plan work, make budgets, use financial agreements, review information, form judgements, evaluate activities, make decisions, solve problems, put plans into action, and keep accurate records
9. Provide an opportunity to grow into an agricultural occupation
10. Provide an opportunity for contributing to the improvement of the home
11. Develop desirable relationships with parents or employers
12. Contribute to community improvement
13. Contribute to desirable relationships among the school, the home, and the community
14. Develop teacher-parent-student understanding and cooperative relationships
15. Develop opportunities for functionalized instruction based on individual needs, interests, and abilities of students, thus making the SOE program the core of the instructional program
16. Provide a basis for evaluating the effectiveness of the instruction in agriculture

17. Develop abilities in cooperation (p. 315).

In 1992, Experiencing Agriculture: A Handbook on Supervised Agricultural Experience was published by the National Council for Agricultural Education. This handbook identifies benefits of supervised agricultural experience programs for students, teachers, employers, agricultural education programs, communities, and businesses in the agricultural industry.

Students are the individuals who will still primarily benefit from conducting supervised agricultural experience programs. By conducting supervised agricultural experience programs, students learn by doing and apply agricultural skills and knowledge learned in classrooms and laboratories. More specifically, students can:

1. Make career and personal choices
2. Develop critical thinking and decision making skills
3. Expand agricultural competencies learned in the classroom and laboratory
4. Gain self confidence
5. Refine human relation skills
6. Explore career/occupational opportunities
7. Gain occupational experiences
8. Apply record keeping skills and learn money management
9. Pursue individualized learning
10. Develop responsibility
11. Develop pride of ownership
12. Achieve independence

13. Develop an appreciation of the work ethic (p. 7).

When students conduct successful supervised agricultural experience programs, agricultural education teachers can recognize benefits too. Successful student supervised agricultural experience programs benefit agricultural education teachers in the following ways:

1. Improves school-community relations
2. Serves as a motivational tool to enhance learning
3. Familiarizes teachers with new technologies and agricultural practices
4. Promotes parental involvement and support of the program
5. Develops public awareness of the agricultural education program
6. Improves the efficiency of agriculture in the community
7. Maintains and promotes an active FFA program
8. Keeps instruction practical, relevant, and industry-based
9. Provides for year-round instruction (p. 7).

Employers also benefit from successful student supervised agricultural experience programs. Benefits employers should see from successful student supervised agricultural experience programs include:

1. Providing a labor force skilled in technical and applied agricultural practices
2. Providing a labor force skilled in the work ethic
3. Providing a labor force experienced in interpersonal relations
4. Keeping youth in the community

5. Assisting schools in keeping instruction relevant and current based on industry needs (p. 7).

Agricultural educators have always been committed to having balanced agricultural education programs consisting of classroom/laboratory instruction, leadership development activities through the FFA, and application of learning through supervised agricultural experience programs. Strong supervised agricultural experience programs are beneficial to the total agricultural education program by:

1. Strengthening vocational emphasis
2. Increasing involvement in FFA activities and award programs
3. Serving as a motivational tool for students
4. Providing basis for year-round instruction
5. Providing opportunities for individualized instruction programs (p. 8).

Communities benefit from students conducting supervised agricultural experience programs as well. Supervised agricultural experience programs benefit communities by:

1. Providing communities with a competent and educated labor force
2. Developing wage-earning capabilities in youth
3. Providing communities with a better informed citizenry on agricultural-related issues
4. Providing leadership to carryout community activities (p. 8).

Businesses of the agricultural industry are the last group that benefit from students conducting strong supervised agricultural experience programs. Benefits agricultural industries should see include:

1. Provides an informed leadership for implementing change

2. Develops a knowledgeable and informed citizenry
3. Develops creative and critical thinking in youth (p. 8).

Parents, students, and teachers have differed on the benefits supervised agricultural experience programs provide. Rawls (cited in Stewart and Birkenholz, 1991) found that "parents had student benefits of supervised occupational experience programs clustered into work attitudes, occupational development activities, and human relation skill benefits" (p. 36). Williams (cited in Stewart and Birkenholz, 1991) surveyed students and found that "students perceived as benefits of supervised occupational experience programs encouragement of keeping records, promoting responsibility, having pride in ownership, helping attain FFA degrees, and encouraging production of animals and crops" (p. 36). Stewart and Birkenholz (1991) surveyed teachers and found that "developing desirable work habits," "increasing levels of student responsibility," "adapting to needs of students," "maintaining complete and accurate records," "increasing students' interest in agriculture," "includes varieties of experiences," "develops competencies in agriculture," "provides for adequate profits or earnings," and "leads to an occupational goal" were the greatest benefits of supervised experience in agriculture (p. 38).

Pals (1988) surveyed parents, employers, and agricultural education instructors to study their perceived benefits of supervised occupational experience programs. The five greatest benefits received from supervised occupational experience programs as perceived by parents, employers, and agricultural education instructors were "promotes acceptance of responsibility," "develops self-confidence," "provides opportunity to learn

on own," "develops independence," and "learns to work with others" (p. 20).

The views among parents, teachers, and employers about benefits of supervised experience programs were different. Parents rated as the greatest benefit "promotes acceptance of responsibility" (p. 20). Teachers rated as the greatest benefit "helps learn things not taught in vocational agriculture" (p. 20). Employers rated as the greatest benefit "helps earn money while in school" (p. 20).

These differences may be explained by stating that agricultural education instructors are doing a less than adequate job of effectively educating parents and employers on SOE program philosophies and procedures (Pals, 1988). If agricultural education instructors would look at benefits perceived by parents and employers and make changes in educating parents and employers according to these perceived benefits, a greater understanding of SOE may occur.

Relationship of Supervised Experience Programs to Student Achievement in Agriculture

Studies indicate there are positive relationships between student participation in supervised experience programs and achievement in agriculture course work and other school performance indicators (Barrick, Hughes, and Baker, 1991). To evaluate student achievement in agriculture, several factors can be studied and analyzed to see their relationship with student achievement. Some factors include high school cumulative grade point average, parental expectations and encouragement, number of years enrolled in agricultural education classes, student involvement in FFA, student interest in agriculture, and teacher effectiveness. These may not be all of the factors that affect student achievement. However, they play an important role in whether students fully

achieve proficiency in agricultural knowledge that helps them get jobs in agriculture in the future.

Morton (1980) concluded there were positive relationships between achievement test scores in agriculture and quality scores of supervised occupational experience programs. There were positive relationships between achievement test scores and cumulative grade point average, number of years completed in agricultural education, and number of visits received by students from their instructor within 12 months' time (p. 24). There were also significant positive relationships between student scores on tests of agricultural knowledge and opportunities to engage in quality supervised experience (Barrick, Hughes, and Baker, 1991).

Slocombe (1985) studied relationships of selected factors toward student participation in and perceptions of SOE placement programs. Students having production agriculture backgrounds achieved higher scores on knowledge tests than did other students. Students living on a farm, being engaged in production SOE programs, wanting production agriculture employment experience, and having occupation plans in production possessed more positive perceptions of SOE placement programs as revealed by SOE program knowledge scores (p. 47).

Tylke and Arrington (1988) reported on relationships of supervised experience program scopes to student achievement in livestock production. They found supervised occupational experience program scopes when measured by Productive Man Work Units (PMWUs) were not significantly related to student achievement in livestock production. Cumulative grade point average, parental encouragement, number of years being

enrolled in agricultural education, participation in FFA activities, and teacher effectiveness were also not significantly related to student achievement in agriculture as measured on multiple choice tests. Students who expressed greater interests in agriculture tended to have higher levels of achievement in livestock production when measured for technical knowledge.

Noxel and Cheek (1988) researched relationships between supervised experience program scopes and student achievement in ornamental horticulture. The study concluded there were positive relationships between student achievement in ornamental horticulture and supervised agricultural experience program scopes when measured on technical knowledge tests. There were also significant positive relationships between student achievement and being previously enrolled in agricultural education courses, being involved in FFA activities, having a greater interest to learn in agriculture, and number of teachers in the agricultural education department.

Arrington and Cheek (1990) looked at relationships between student achievement in agriculture and supervised experience program scopes in agribusiness and natural resources education. Two different agricultural education courses, Fundamentals of Agribusiness and Natural Resources and Applied Principles of Agricultural Occupations, were surveyed to determine student achievement in the respective courses. From research studies, the authors concluded there were positive relationships between student achievement and SAE scope for students enrolled in the applied principles class. Student achievement and students' cumulative grade point average were positively related to student achievement in both classes as well as being involved in FFA

activities and general interest in agriculture. Student achievements were positively related to parental expectations in the fundamentals class. The same was true when student achievements were compared to teacher effectiveness. There were no significant relationships in either class when student achievements were compared to number of years enrolled in agricultural education.

As the nature of agriculture has changed, so has the agricultural education curriculum. Many states have moved to a science based curriculum to teach students the scientific principles of agriculture. With changes in curriculum, types of supervised experience projects have also changed. In 1993, Randell, Arrington and Cheek conducted research to look at relationships of supervised agricultural experience program participation and student achievement in practical skills in agricultural science. Factors studied included SAE scope, cumulative grade point average, socioeconomic status, FFA involvement, and student interest in agriculture. The only significant positive relationship that existed was between student grade point average and student achievement in agriscience education.

The Roles of Teachers in Supervised Agricultural Experience

The persons with the primary responsibility for seeing students have successful supervised agricultural experience programs are agricultural education teachers. Teachers may criticize students, parents, or even local communities for downfalls of supervised experience programs, but ultimately, the burden lies with agricultural education teachers (Phipps and Osborne, p. 322: 1988).

Instructors should take responsibility to make sure that classroom instruction is

related to occupational experience programs of students (Harris, 1983). McComas (cited in Barrick, Hughes, and Baker, 1991) stated "it is also the obligation of instructors to provide worthwhile experiences including farm placement for students and assist in maintaining accurate records" (p. 33). Instructors should also plan, develop, and evaluate supervised agricultural experience programs of students. To be done effectively, teachers must supervise students' programs through on-farm or job visits (Harris, 1983).

Phipps and Osborne (1988) identified rules teachers should follow to produce superior programs of supervised occupational experience. Teachers should:

1. Provide systematic instruction on SOE programs
2. Encourage high standards for the program
3. Encourage modern, up-to-date, and economical approved practices and complete, accurate records
4. Visit each program frequently and give helpful assistance to the student, the parents, and the employer
5. Try to develop the interest and pride of the students in doing jobs which will result in desirable educational and financial returns
6. Demonstrate enthusiasm, commitment, and a supportive philosophy
7. Base the classroom instruction on the programs of the students, and give the students an opportunity to study, discuss, and decide on the best possible approved practices to follow in conducting their programs
8. Develop cooperative teacher-parent-student relationships
9. Guide the students in developing well balanced, comprehensive programs
10. Guide students in career planning, SOE planning and development, and movement toward establishment in an agricultural occupation

11. Assist in identifying and developing SOE opportunities within the school and community
12. Provide feedback to students in their progress and suggest areas of improvement and modification
13. Help students see relationships between SOE programs, the FFA program, and instruction in the classroom and laboratory
14. Encourage students to adopt practices and experiment with new methods in their SOE program (p. 322).

With types of supervised agricultural experience programs changing, the roles and responsibilities of agricultural education instructors are also changing. In 1992, the National Task Force on Supervised Agricultural Experience identified responsibilities agricultural education instructors should perform in order for there to be quality student supervised agricultural experience programs. The responsibilities of instructors today should include:

1. Identifying appropriate SAE opportunities in the community
2. Ensuring that SAE programs truly represent meaningful learning activities that will benefit students, the agricultural education program, and the community
3. Informing school administrators about SAE and securing their support
4. Providing classroom instruction on SAE
5. Adopting a suitable record keeping system for students to keep accurate financial transactions and record student competency development
6. Clearly communicating to the other partners the purposes and procedures of SAE programs
7. Helping students select quality SAE programs based on individual student's aptitudes and abilities

8. Assisting students in planning SAE programs and acquiring needed resources
9. Providing adequate and meaningful supervision to students
10. Coordinating among students, parents, and employers
11. Providing individual student instruction related to his/her SAE program
12. Evaluating SAE programs
13. Encouraging students to improve their SAE programs
14. Providing employers, parents, guardians, and students sufficient advance notice of supervisory visits
15. Selecting and securing appropriate training stations
16. Evaluating training stations for suitability for SAE programs (p. 9).

The greatest responsibility teachers must perform with supervised agricultural experience programs is supervision. McCracken (cited in Harris, 1983) commented that the success or failure of supervised occupational experience programs for students depends, to a large degree, upon the effectiveness of supervision by the teacher. Supervision is the opportunity to direct activities of learners so as to produce desirable learning and increase quality (Harris, 1983). Supervision can also develop essential cooperative relationships with employers and parents/guardians (Experiencing Agriculture, 1992). Without supervision, supervised experience programs would be like schools without teachers (McMillion and Auville, 1976).

Lindsey (cited in Barrick, Hughes, and Baker, 1991) reported that with increasing numbers of limited opportunity students enrolled in agricultural education, instructors will be required to devote extra effort to ensure that students have successful

supervised experience programs (p. 34). Williams (cited in Boone, Doerfert, and Elliot, 1987) identified ways teachers can provide assistance in helping students have successful supervised experience programs. They are "assisting in record keeping," "providing encouragement," "summarizing SOE program records," "teaching skills in agriculture," and "setting educational goals in agriculture" (p. 61).

Problems With Conducting Supervised Agricultural Experience Programs

There are numerous problems with conducting or having supervised agricultural experience programs. As a result, fewer and fewer students are conducting supervised agricultural experience programs. Iverson (1980) reported that 40 percent of agricultural education students in the Southern Region lacked an SOE program. Berkey and Sutphin (1983) stated that one-fourth of vocational agriculture programs in New York failed to have written SOE program plans for students. In Florida (Arrington and Price, 1983), 68 percent of the agricultural education students had undertaken an SOE program for one year out of four.

There are many reasons why students do not conduct supervised agricultural experience programs or are limited in their supervised experience. Foster (1987) studied and identified factors that affected student participation in SOE programs in Nebraska. Many different types of factors can affect student participation in SOE including school district factors, agricultural education program factors, economic factors, student factors, and social factors.

The fourteen leading factors identified as limiting vocational agriculture student participation in SOEP included:

1. Students dislike maintaining SOE program records
2. Student participation in sports is excessive
3. Current loan interest rates are too high
4. Money available for students to finance SOE is limited
5. Agribusinesses are hiring fewer student learners
6. Parents ability to help with financing is limited
7. Number of agribusinesses needed for placement in community is limited
8. No facilities available for non-traditional SOE programs
9. Student participation in school activities other than sports is excessive
10. No school land-laboratory is available
11. Financing available through lending institutions is limited
12. Minimum wage is too high for employing student-learners
13. No teacher time for SOE supervision
14. Students lack the desire for an SOE program (p. 47).

Greater problems exist today when trying to get students to conduct supervised agricultural experience programs. There are increasing numbers of students entering programs today who have difficulty maintaining traditional supervised agricultural experience programs due to financial hardships, places of residence, academic abilities, or other factors.

Significant changes have occurred in agriculture which have also altered needs for traditional programs of supervised experience. Some of the changes are:

1. Fewer students come from farms or ranches and bring with them very limited agricultural experiences and skills.
2. The ethnic demography of the United States is changing drastically. A diverse student clientele rich in cultural differences and with a much more varied academic and vocational preparation is found today.
3. Fewer entrepreneurial opportunities in agriculture are found today. Most opportunities offered are for working as employees in someone else's business - and usually not on a farm or ranch.
4. Agricultural jobs have become more technical, often requiring advanced training and education. Fewer students are going directly from high school to occupational employment.
5. Unionization, governmental regulations, and insurance requirements have made it difficult for school-age persons to become employed in many agricultural occupations.
6. The cost of acquiring land, equipment, livestock, supplies or financing has become prohibitive for some students. Students are seldom able to invest heavily in their enterprises.
7. The increased pace of life and multiplicity of recreational opportunities diverts many students from early participation in long-term work or career oriented activities.
8. High school graduation requirements have limited student access to agricultural education curriculums, and secondary agriculture programs have become more flexible to offering semester and trimester agriculture courses (Experiencing Agriculture, 1992: p. 2).

Semester Courses in Agricultural Education

Semester courses have been developed in some states to deal with various problems in agricultural education. Semester courses have been developed to help increase enrollments in agricultural education. With enrollment decreasing, leaders in some states thought that developing and offering semester courses would not only increase enrollments, but would bring more non-traditional and academic students into

agricultural education. This has proved to be true in some states.

Semester courses have also been developed to help students who are faced with stiffer high school graduation requirements. Many students are unable to take year long courses in agricultural education . Many students are unable to complete four years of agricultural education because of new graduation requirements. Semester courses have allowed students to take classes when they can fit them into their schedules.

States like Tennessee and Texas have taken on the challenge of developing and offering semester courses in agricultural education. Tennessee currently offers 22 semester courses in agricultural education while Texas offers 23. These courses cover all areas of agriculture from animal science to plant science, and agribusiness to environmental science. After completing basic introductory courses in agricultural education, students can select specific semester courses to study and conduct supervised experience programs related to those courses.

Summary

Through this review of related literature, the researcher has learned that there are still many positive benefits to be recognized if students conduct supervised agricultural experience programs. Students who conduct supervised agricultural experience programs will generally do better in their agricultural education courses. Agricultural education teachers must identify these benefits and assist students in making sure quality supervised agricultural experience programs are planned and conducted.

With numerous problems facing agricultural education and supervised experiences in agriculture, many states have gone away from basic production courses

to specialized semester courses in agricultural education. Leaders in these states must make sure that quality agricultural education curriculums are developed that will prepare students for new and challenging careers in agriculture and still allow them to develop these skills through supervised agricultural experience programs.

CHAPTER III

PROCEDURES AND METHODOLOGY

The purpose of the study was to describe the attitudes and philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs for all students enrolled in agricultural education courses.

This chapter is divided into five sections. The first section discusses how the sample was selected for the study. Section two discusses the research design of the study. Instrumentation procedures are discussed in section three. Section four discusses data collection procedures. The final section discusses data analysis procedures used in the study.

Sample Size

The population for the study included all agricultural education teachers who had taught agricultural education at least one year in Tennessee. According to the Tennessee State Department of Education, Vocational Education Department, there were 225 agricultural education teachers in Tennessee at the beginning of the 1993-94 school year who had taught agricultural education at least one year.

The following formula from McCall (1982) was used to calculate the appropriate sample size for the study:

$$n = p (1 - p) / [(e^2 / Z^2) + p (1 - p) / N] \text{ (p. 194).}$$

According to McCall (1982), the symbols mean the following:

n is the estimated number of individuals necessary in the sample for the desired precision and confidence,

p is the preliminary estimate of the proportion of the population,

Z is the two-tailed value of the standardized normal deviate associated with the desired level of confidence,

e is the acceptable error, or half of the maximum acceptable confidence interval, and

N is the number of individuals or entities in the population (p. 194).

The desired confidence interval was set at 95 percent, leaving a margin of error at five percent. The Z score for the five percent level of significance for a two-tailed test was 1.96 (Ferguson and Takane, 1989).

Using the formula and numbers above, the sample size needed for the study was calculated to be:

$$n = p (1 - p) / [(e^2 / Z^2) + p (1 - p) / N]$$

$$n = .5 (1 - .5) / [(.05^2 / 1.96^2) + .5 (1 - .5) / 225]$$

$$n = .5 (.5) / [(.0025/3.8416) + .5 (.5) / 225]$$

$$n = .25 / [.00065077 + .25 / 225]$$

$$n = .25 / [.00065077 + .00111111]$$

$$n = .25 / .00176188$$

$$n = 141.9$$

The size of the sample for the study was 142 agricultural education teachers. To increase the possibility of having a 95% confidence level, the researcher increased the sample to include 150 agricultural education teachers.

After determining the sample size, each teacher who had taught agricultural

education at least one year in Tennessee was assigned a number. Using a random sample procedure, 150 teachers were selected to be included in the sample.

Design of Study

The study was descriptive correlational. Data were collected to determine and understand Tennessee agricultural education teacher attitudes and philosophies regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs.

Instrumentation Procedures

The instrument used to collect data for the study was in the form of a questionnaire. The questionnaire was developed by the researcher after reading related literature and reviewing questionnaires used in similar studies. A copy of the questionnaire used for this study is located in Appendix A.

The questionnaire contained four parts. The first part asked for demographic data of the agricultural education teachers in Tennessee. Part two contained 20 Likert-type statements dealing with agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs. The third part consisted of 10 Likert-type statements asking agricultural education teachers to indicate their philosophies regarding planning activities for supervised agricultural experience programs. The final part of the questionnaire contained 15 Likert-type questions dealing with the philosophies of agricultural education teachers regarding supervision strategies used with supervised agricultural experience programs.

Questions asking for demographic data consisted of both open and closed ended response categories, depending on the type of data needed for the study. Questions dealing with the attitudes and philosophies regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs were Likert-type statements. These statements were based on the following scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

The questionnaire was given to the researcher's graduate committee in order to determine content validity. No changes were recommended to the questionnaire. After the researcher's graduate committee approved the research proposal and questionnaire, a proposal to conduct the study was sent to the Human Subjects Committee at The University of Tennessee.

After receiving approval from the Human Subjects Committee to conduct the study, the researcher conducted a pilot test to determine face validity and reliability of the survey instrument. Twenty-five agricultural education teachers who were not selected as part of the sample for the study were sent the questionnaire. To determine the reliability on the parts two, three, and four of the questionnaire, the researcher checked the internal consistency of each part using Cronbach's Alpha. Reliability coefficients calculated were .9344 for the importance of supervised agricultural experience programs, .8667 for planning activities, and .7961 for supervision strategies. These reliability coefficients were considered acceptable. Even though the internal consistency of the survey instrument could have been improved with the deletion of

some of statements, the researcher, after consulting with members of his Graduate Committee, decided to leave all statements in the survey instrument. Some questions were reworded to improve the face validity of the questionnaire and insure agricultural education teachers provided the correct data needed for the study.

Data Collection Procedures

After conducting the pilot study, those agricultural education teachers selected to be in the sample were mailed a copy of a numbered questionnaire, a list of definitions relevant to the study and a self-addressed stamped envelope for returning the questionnaire to the researcher. A cover letter from the researcher and the researcher's major advisor explaining the purpose of the study accompanied the questionnaire. The cover letter explained to teachers that their participation in the survey was totally voluntary. The cover letter also assured that respondents' names would not be linked with their responses. A copy of the letter and follow-up letters used in data collection are located in Appendix B.

Appropriate mailing and follow-up procedures as outlined by Dillman (1978) were utilized in this study. The first mailing was sent out. After two weeks, non-respondents were mailed a follow-up letter asking them to complete the questionnaire. After another two weeks, those teachers who had still not returned the questionnaire were mailed another cover letter, list of definitions, questionnaire, and self-addressed stamped envelope. Two weeks after this mailing, 119 of 150 questionnaires had been returned for a response rate of 79.3%. Of the 119 questionnaires returned, 12 were non-usable due to incomplete data making the overall usable response rate 71.3%

An analysis was done to determine if significant differences existed between early and late respondents. There were no significant differences between early and late respondents. Since late responders are similar to non-responders (Miller and Smith, 1983), no additional follow-up was considered necessary. It was assumed that findings from the sample were generalizable to the population from which it was drawn.

Following the return of the questionnaires, internal consistency of the questionnaire was again checked using Cronbach's Alpha. Reliability coefficients were calculated to be .8848 for importance of supervised agricultural experience programs, .8183 for planning activities, and .8506 for supervision strategies. While the internal consistency could have been improved with the deletion of some statements, the researcher chose to leave all questions in the study because of the acceptable reliability scores.

Data Analysis Procedures

Data were analyzed using the Statistical Package for the Social Sciences (SPSS Release 4.1) on the IBM 3081 mainframe computer at The University of Tennessee Computing Center. Alpha levels were established at .05 to determine any significant differences. To analyze nominally scaled variables, descriptive statistics including frequencies and percentages were used. Nominally scaled variables analyzed using frequencies and percentages were:

- (a) How many teachers of agricultural education are in your department?
- (b) Do you teach any semester courses in agricultural education?
- (c) Are you currently a member of the Tennessee Vocational Agriculture Teachers Association (TVATA)?

- (d) Are you currently a member of the National Vocational Agriculture Teachers Association (NVATA)?
- (e) Do you currently subscribe to The Agricultural Education Magazine?
- (f) Did you attend the agricultural education teachers conference this past summer?
- (g) What is the length of your annual teaching contract in months?
- (h) Did you enroll in agricultural education courses while a high school student?
- (i) Did you conduct a supervised experience program while in high school?
- (j) Did your supervised agricultural experience program count as a part of your grade in agricultural education?
- (k) Do you count your students' supervised agricultural experience programs as a part of their grade in agricultural education?
- (l) Do you have a class period during the school day that allowed you to leave school and supervise students' supervised agricultural experience programs?

To analyze intervally scaled variables, descriptive statistics including means and standard deviations were used. Intervally scaled independent variables analyzed using means and standard deviations were:

- (a) Not including this school year, how many years have you taught agricultural education?
- (b) What is your age?
- (c) How many total students were enrolled in the agricultural education program at your school last year?
- (d) How many total students conducted supervised agricultural experience programs last year in your program?

- (e) How many total days were spent last school year teaching first year agricultural education students on selecting, planning, and conducting supervised agricultural experience programs?
- (f) How many total days were spent last school year teaching other agricultural education students on selecting, planning, and conducting supervised agricultural experience programs?
- (g) How many total days during the school year and summer months did you spend supervising students' supervised agricultural experience programs?

When analyzing data, four nominally scaled independent variables were used to compute one intervally scaled independent variable. The four nominally scaled independent variables dealt with the amount of training an agricultural education teacher had in regard to supervised agricultural experience programs. Specifically, the question was: What type(s) of professional training have you had concerning supervised agricultural experience programs? Respondents could check the following responses:

- (a) undergraduate level college course,
- (b) graduate level college course,
- (c) workshops, and
- (d) other.

Agricultural education teachers checked which types of professional training they had received on supervised agricultural experience programs. For each check mark, a point was added into a value called "training score". Training score values could range from 1 to 4. A value of 1 meant that the agricultural education teacher had received one of the four different types of training on supervised agricultural experience programs. A value of 4 meant that the agricultural education teacher had received training on supervised agricultural experience programs at all four levels.

Interval scales of measurement were used when computing dependent variables. These statements pertained to the attitudes and philosophies of agricultural education teachers regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs. These statements were based on the following scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. These statements were analyzed using descriptive statistics including means and standard deviations.

After means and standard deviations were calculated for each one of the individual statements on parts two, three, and four in the study, overall philosophy scores for the importance of supervised agricultural experience program, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs were calculated for each respondent that participated in the study. Overall philosophy scores regarding the importance of supervised agricultural experience programs could range from 20 to 80. Overall philosophy scores regarding planning activities for supervised agricultural experience programs could range from 10 to 40. Overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs could range from 15 to 60. Total scores on these parts were used only to determine if significant differences existed between agricultural education teacher demographic characteristics and their overall philosophies regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience

programs, and supervision strategies used with supervised agricultural experience programs. Student's t-tests were used to determine if significant differences existed between nominally scaled independent variables and dependent variables. Pearson correlation coefficients were used to describe the magnitude of relationships between intervally scaled independent variables and dependent variables.

CHAPTER IV

PRESENTATION OF DATA AND FINDINGS

The purpose of this chapter is to present findings about agricultural education teacher attitudes and philosophies regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs.

This chapter is divided into seven parts. Part one presents the demographic characteristics of Tennessee agricultural education teachers. The second part describes Tennessee agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs. Agricultural education teacher philosophies regarding planning activities for supervised agricultural experience programs are discussed in the third part. Part four describes agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs. The relationships between agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs and agricultural education teacher demographic characteristics are discussed in part five. The sixth part presents the relationships between agricultural education teacher philosophies regarding planning activities for supervised agricultural experience programs and agricultural education teacher demographic characteristics. The final part describes the relationships between agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs and

agricultural education teacher demographic characteristics.

Demographic Characteristics of Tennessee Agricultural Education Teachers

The first research question to be answered was: What were the demographic characteristics of agricultural education teachers in Tennessee? Data in Table 1 describe nominally scaled demographic characteristics of the Tennessee agricultural education teachers who participated in the study. Specific questions which pertained to this type of demographic data were:

1. How many teachers of agricultural education are in your department?
2. Do you teach any semester courses in agricultural education?
3. Are you currently a member of the Tennessee Vocational Agriculture Teachers Association (TVATA)?
4. Are you currently a member of the National Vocational Agriculture Teachers Association (NVATA)?
5. Do you currently subscribe to The Agricultural Education Magazine?
6. Did you attend the agricultural education teachers conference this past summer?
7. What is the length of your annual teaching contract in months?
8. Did you enroll in agricultural education courses while a high school student?
9. Did you conduct a supervised experience program in agriculture while in high school?
10. Did your supervised experience program count as a part of your grade in agricultural education?
11. Do you count your students' supervised experience program as a part of their grade in agricultural education?
12. Did you have a class period during the school day last year that allowed you to leave school and supervise students' supervised agricultural experience programs?

TABLE 1. Nominally Scaled Demographic Characteristics Of Tennessee Agricultural Education Teachers

Nominally Scaled Variables	Respondents	
	Number	Percent
Number of Teachers in Department		
One	63	58.9
Two or More	<u>44</u>	<u>41.1</u>
Total	107	100.0
Teach Semester Courses in Agricultural Education		
Yes	63	58.9
No	<u>44</u>	<u>41.1</u>
Total	107	100.0
Tennessee Vocational Agriculture Teachers Association (TVATA) Member		
Yes	104	97.2
No	<u>3</u>	<u>2.8</u>
Total	107	100.0
National Vocational Agriculture Teachers Association (NVATA) Member		
Yes	77	72.0
No	<u>30</u>	<u>28.0</u>
Total	107	100.0
Current Subscriber to <u>The Agricultural Education Magazine</u>		
Yes	36	33.6
No	<u>71</u>	<u>66.4</u>
Total	107	100.0
Attended Agricultural Education Teachers Conference This Past Summer		
Yes	98	91.6
No	<u>9</u>	<u>8.4</u>
Total	107	100.0

TABLE 1. (continued)

Nominally Scaled Variables	Respondents	
	Number	Percent
Length of Teaching Contract		
Less than 12 months	13	12.1
12 months	<u>94</u>	<u>87.9</u>
Total	107	100.0
Enrolled in Agricultural Education Courses While a High School Student		
Yes	85	79.4
No	<u>22</u>	<u>20.6</u>
Total	107	100.0
Conducted a Supervised Experience Program While in High School		
Yes	80	74.8
No	4	3.7
Missing	<u>23</u>	<u>21.5</u>
Total	107	100.0
Supervised Agricultural Experience Program Was Counted as Part of Your Grade in Agricultural Education		
Yes	59	55.2
No	24	22.4
Missing	<u>24</u>	<u>22.4</u>
Total	107	100.0
Supervised Agricultural Experience Program is Counted as Part of Students' Grade in Agricultural Education		
Yes	68	63.6
No	<u>39</u>	<u>36.4</u>
Total	107	100.0

TABLE 1. (continued)

Nominally Scaled Variables	Respondents	
	Number	Percent
Class Period During School Day to Leave School and Supervise Students' Supervised Agricultural Experience Programs		
Yes	22	20.6
No	<u>85</u>	<u>79.4</u>
Total	107	100.0
Professional Training Received on Supervised Agricultural Experience Programs		
Undergraduate Level College Course	99	92.5
Graduate Level College Course	72	67.3
Attended Workshops on Supervised Agricultural Experience Programs	89	83.2
Received Other Types of Training on Supervised Agricultural Experience Programs	8	7.5

13. What type(s) of professional training have you had concerning supervised agricultural experience programs?

Respondents were asked how many teachers of agricultural education were in their department. Among the 107 responding in the study, 63 (58.9 percent) taught in single teacher agricultural education departments while 44 (41.1 percent) taught in multiple teacher departments (two or more teachers).

Respondents were also asked if they taught specialized semester courses in agricultural education. Sixty-three (58.9 percent) of those that responded taught specialized semester courses in agricultural education while 44 (41.1 percent) did not teach such courses.

A series of four questions asked respondents to indicate professional organizations they belonged to and how they kept up professionally with trends in agricultural education. Almost all of the agricultural education teachers responding (104 of 107 or 97.2 percent) were currently members of the Tennessee Vocational Agriculture Teachers Association (TVATA). Seventy-seven of those responding (72.0 percent) were currently members of the National Vocational Agriculture Teachers Association (NVATA). Approximately one-third of those responding (36 of 107 or 33.6 percent) subscribed to The Agricultural Education Magazine. A majority of the respondents (98 of 107 or 91.6 percent) attended the agricultural education teachers summer conference during the past summer.

Respondents were asked to indicate the length of their teaching contracts. Ninety-four of 107 respondents (87.9 percent) were on twelve month teaching contracts. Thirteen (12.1 percent) had teaching contracts less than twelve months. They had either

nine month, ten month, or eleven month teaching contracts.

Respondents were also asked to respond to a series of three questions dealing with their high school backgrounds in agricultural education. Among those responding in the study, 85 (79.4 percent) enrolled in agricultural education courses while they were high school students. Twenty-two (20.6 percent) did not enroll in agricultural education courses while high school students or else these courses were not offered at their high schools. Of those 85 agricultural education teachers who had enrolled in agricultural education courses while they were high school students, 80 of them conducted supervised experience programs while four of them did not. Also, of those 85 agricultural education teachers who enrolled in agricultural education courses while high school students, 59 said their supervised agricultural experience programs were counted as part of their grade in agricultural education. Twenty-four said their supervised agricultural experience programs did not count as part of their grade in agricultural education.

Respondents were then asked if they counted their students' supervised agricultural experience programs as part of their grade in agricultural education at the present time. Sixty-eight of 107 (63.6 percent) responded that they did count their students' supervised agricultural experience programs as part of their grade in agricultural education.

Respondents were asked to indicate if they had a class period during the school day to leave school and supervise students' supervised agricultural experience programs. Only 22 of 107 teachers responding (20.6 percent) had such a period to supervise

students' supervised agricultural experience programs.

Respondents were asked a question dealing with the types of professional training they have received on supervised agricultural experience programs. Responses that could be checked were undergraduate level college course, graduate level college course, workshops, and other. Ninety-nine respondents (92.5 percent) indicated they had completed an undergraduate college course on supervised agricultural experience programs. Seventy-two respondents (67.3 percent) indicated they had completed a graduate level college course on supervised agricultural experience programs. Eighty-nine respondents (83.2 percent) indicated they had attended some type of workshop on supervised agricultural experience programs. Eight respondents (7.5 percent) indicated they had received some other types of training on supervised agricultural experience programs. Other types of training received on supervised agricultural experience programs included the respondents' years of teaching experience and attending TVATA conferences.

Data in Table 2 describe interally scaled Tennessee agricultural education teacher demographic characteristics. Specific questions which pertained to interally scaled demographic data were:

1. Not including this school year, how many years have you taught agricultural education?
2. What is your age?
3. How many total students were enrolled in the agricultural education program at your school last year?

TABLE 2. Intervally Scaled Demographic Characteristics of Tennessee Agricultural Education Teachers

Intervally Scaled Variables	Respondents	
	$\bar{x}$	s.d.
Number of Years Teaching Agricultural Education	15.55	8.38
Age	41.10	9.03
Total Number of Students Enrolled in Agricultural Education Program Last Year	124.37	52.03
Total Number of Students in Program Last Year Conducting Supervised Agricultural Experience Programs	72.78	50.61
Total Number of Days Spent Teaching First Year Agricultural Education Students About Supervised Agricultural Experience Programs	11.03	7.31
Total Number of Days Spent Teaching Other Agricultural Education Students About Supervised Agricultural Experience Programs	8.62	8.45
Total Number Days Spent During School Year and Summer Months Supervising Students' Supervised Agricultural Experience Programs	32.73	36.95

4. How many total students conducted supervised agricultural experience programs last year in your program?
5. How many total days were spent last school year teaching first year agricultural education students on selecting, planning, and conducting supervised agricultural experience programs?
6. How many total days were spent last school year teaching other agricultural education students on selecting, planning, and conducting supervised agricultural experience programs?
7. How many total days during the school year and summer months did you spend supervising students' supervised agricultural experience programs?

Respondents were asked to answer questions on the number of years they have taught agricultural education and their age. As reported in Table 2, the average agricultural education teacher was 41.10 years old and had taught agricultural education for 15.55 years.

Respondents were also asked to provide data about their agricultural education programs from last school year. Agricultural education teachers last school year had, on the average, 124.37 students enrolled in their agricultural education programs with 72.78 of them conducting supervised agricultural experience programs. During this time, agricultural education teachers in Tennessee spent on average 11.03 days teaching first year agricultural education students about selecting, planning, and conducting supervised agricultural experience programs. Agricultural education teachers only spent on average 8.62 days teaching other agricultural education students about selecting, planning, and conducting supervised agricultural experience programs. Agricultural education teachers spent approximately 33 days during the school year and summer months supervising their students' supervised agricultural experience programs. These

data are also shown in Table 2.

Tennessee Agricultural Education Teacher Philosophies Regarding the Importance of Supervised Agricultural Experience Programs

The second research question of the study was: What were the philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs for students? Data in Table 3 describe the philosophies regarding the importance of supervised agricultural experience programs of agricultural education teachers who participated in the study.

Agricultural education teachers participating in the study responded to 20 Likert-type statements regarding the importance of supervised agricultural experience programs for students. Scores were calculated based on the following scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

As reported in Table 3, average philosophy scores on individual philosophy statements regarding the importance of supervised agricultural experience programs ranged from 1.62 to 3.64. The statement regarding the importance of supervised agricultural experience programs that received the highest score was, "Supervised agricultural experience programs should be based on the educational philosophy of learning by doing". The lowest scoring statement regarding the importance of supervised agricultural experience programs was, "Teaching lessons on supervised agricultural experience is a waste of time."

After recoding all negative statements, scores of all 20 statements for each respondent were added together to determine his/her overall philosophy score regarding the importance of supervised agricultural experience programs. The average overall

TABLE 3. Tennessee Agricultural Education Teacher Philosophies Regarding the Importance of Supervised Agricultural Experience Programs

Statement Regarding Importance of SAEP	Respondents	
	$\bar{x}^a$	s.d.
Supervised agricultural experience programs should be based on the educational philosophy of learning by doing.	3.64	.48
All students that conduct supervised agricultural experience programs should be <u>encouraged</u> to keep records on their program.	3.58	.50
Supervised agricultural experience should be a valuable component of agricultural education programs today.	3.45	.55
Supervised agricultural experience programs are an essential component of the total agricultural education program.	3.42	.65
Topics on supervised agricultural experience should be taught to prospective agricultural education teachers.	3.33	.51
Student teachers should supervise students' supervised agricultural experience programs while student teaching.	3.33	.51
An important aspect of supervised agricultural experience programs should be that they provide first hand occupational experiences in agriculture.	3.28	.51
Opportunities for supervised agricultural experience should be discussed in every course offered in agricultural education.	3.28	.64
Supervised agricultural experience programs should be instrumental in preparing students for careers in agriculture.	3.23	.54
Supervised agricultural experience programs should be promoted in <u>all</u> agricultural education classes.	3.21	.56
Students should receive credit toward graduation for completing supervised agricultural experience programs.	3.15	.71

TABLE 3. (continued)

Statement Regarding Importance of SAEP	Respondents	
	$\bar{x}^a$	s.d.
Supervised agricultural experience programs should relate to students' occupational goals.	3.14	.62
Supervised agricultural experience programs should have a lot to do with FFA degree advancement.	3.14	.71
If students lack adequate resources at home and/or farm, worthwhile supervised agricultural experience programs can be completed on school owned or school managed properties.	3.14	.61
All agricultural education students enrolled in semester agricultural education courses should be <u>encouraged</u> to conduct supervised agricultural experience programs.	3.13	.58
The present supervised agricultural experience concept is workable with today's agricultural education programs.	2.94	.70
Supervised agricultural experience programs make agricultural education programs vocational.	2.94	.68
Students' grades in agricultural education should be based partly on their supervised agricultural experience programs.	2.84	.70
Good supervised agricultural experience programs can be conducted by <u>all</u> students enrolled in agricultural education.	2.48	.74
Teaching lessons on supervised agricultural experience is a waste of time.	1.62	.59
Average Overall Philosophy Score Regarding the Importance of Supervised Agricultural Experience Programs = 64.09, s.d. = 6.84		

^a 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree

philosophy score regarding the importance of supervised agricultural experience programs was 64.09 with a standard deviation of 6.84. The overall philosophy score regarding the importance of supervised agricultural experience programs could range from 20 to 80 with a midpoint of 50. Since the average overall philosophy score for respondents in the study was 64.09, this indicated that respondents had a positive philosophy regarding the importance of supervised agricultural experience programs. Low standard deviation scores on the individual philosophy statements regarding the importance of supervised agricultural experience programs indicated that respondents were in agreement with regard to the importance of supervised agricultural experience programs.

Tennessee Agricultural Education Teacher Philosophies Regarding Planning Activities For Supervised Agricultural Experience Programs

The third research question to be answered in the study was: What were the philosophies of Tennessee agricultural education teachers regarding planning activities for supervised agricultural experience programs? Data in Table 4 describe the philosophies of the agricultural education teachers who participated in the study regarding planning activities for supervised agricultural experience programs.

Agricultural education teachers who participated in the study responded to 10 Likert-type statements to indicate their philosophies regarding planning activities for supervised agricultural experience programs. Scores were calculated based on the following scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

As reported in Table 4, average philosophy scores on individual philosophy statements regarding planning activities for supervised agricultural experience programs

TABLE 4. Tennessee Agricultural Education Teacher Philosophies Regarding Planning Activities For Supervised Agricultural Experience Programs

Planning Activity Statement	Respondents	
	$\bar{x}^a$	s.d.
Agricultural education instructors should help students plan and carry out worthwhile supervised agricultural experience programs.	3.34	.53
Parents should be involved in helping plan their child's supervised agricultural experience program.	3.23	.51
Students should have written plans for conducting their supervised agricultural experience programs.	3.20	.52
Real problems encountered by students in their supervised agricultural experience programs should be used as topics for classroom instruction.	3.20	.44
Class time should be used to update record books.	3.05	.62
Class time should be used for individual supervised agricultural experience planning.	3.03	.62
Orientation programs on supervised agricultural experience should be presented to students and their parents at the beginning of the school year.	3.01	.51
Schools should provide adequate facilities and resources for students to use to complete supervised agricultural experience programs if students lack the appropriate resources at home and/or farm.	3.01	.77
Students' supervised agricultural experience programs should be planned to meet their career objectives.	2.97	.52
New students enrolling in agricultural education should be visited before the school year begins.	2.70	.70

Average Overall Philosophy Score on Planning Activities for Supervised Agricultural Experience Programs = 30.73, s.d. = 3.59

^a 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree

ranged from 2.70 to 3.34. The highest rated statement regarding planning activities for supervised agricultural experience programs was, "Agricultural education instructors should help students plan and carry out worthwhile supervised agricultural experience programs." The lowest rated statement regarding planning activities for supervised agricultural experience programs was, "New students enrolling in agricultural education should be visited before the school year begins."

Scores from all 10 statements for each respondent were added together to determine his/her overall philosophy score regarding planning activities for supervised agricultural experience programs. The average overall philosophy score regarding planning activities was 30.73 with a standard deviation of 3.59. The overall philosophy score regarding planning activities for supervised agricultural experience programs could range from 10 to 40 with a midpoint of 25. Since the average overall philosophy score for respondents in the study was 30.73, this indicated that respondents had a positive philosophy regarding planning activities for supervised agricultural experience programs. Low standard deviation scores on the individual philosophy statements regarding planning activities for supervised agricultural experience programs indicated that respondents were in agreement with regard to planning activities for supervised agricultural experience programs.

Tennessee Agricultural Education Teacher Philosophies Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs

The next research question to be answered in the study was: What were the philosophies of Tennessee agricultural education teachers regarding supervision strategies used with supervised agricultural experience programs? Data in Table 5

TABLE 5. Tennessee Agricultural Education Teacher Philosophies Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs

Supervision Strategy Statement	Respondents	
	$\bar{x}^a$	s.d.
Agricultural education teachers should supervise students' supervised agricultural experience programs during the summer months as a part of their extended contracts.	3.59	.49
Supervised agricultural experience programs must be supervised during the summer months as well as during the school year.	3.48	.45
Teachers should conduct on-site supervisory visits at students' homes, farms, and workplaces.	3.34	.51
For supervision to be effective, teachers need to make on-site supervisory visits.	3.32	.59
Supervision should be used as a teaching/learning opportunity.	3.31	.46
Supervision should motivate students to carry on successful supervised agricultural experience programs.	3.29	.46
Students should receive supervisory visits when they encounter problems with their supervised agricultural experience programs.	3.29	.51
Teachers should talk with parents on supervisory visits.	3.29	.50
Teachers should keep written records of students' supervisory visits.	3.29	.60
Students' supervised agricultural experience programs should be evaluated on a regular basis.	3.21	.47

TABLE 5. (continued)

Supervision Strategy Statement	Respondents	
	$\bar{x}^a$	s.d.
School administrators should be supportive of time off during the school day for teachers to make supervisory visits.	3.16	.73
Teachers should inform students of their plan for supervised agricultural experience visits ahead of time.	3.11	.59
Students should be visited at least once per semester.	2.90	.64
Students should be visited during each grading period.	2.22	.69
Students and their supervised agricultural experience programs should be visited <u>only</u> during the summer.	1.85	.45
Average Overall Philosophy Score Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs = 47.94, s.d. = 4.73		

^a 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree

describe the responses of the agricultural education teachers in Tennessee who participated in the study.

Agricultural education teachers who participated in the study responded to 15 Likert-type statements to indicate their philosophies regarding supervision strategies used with supervised agricultural experience programs. Scores were calculated based on the following scale: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree.

As reported in Table 5, average philosophy scores on individual philosophy statements regarding supervision strategies used with supervised agricultural experience programs ranged from 1.85 to 3.59. The highest rated statement regarding supervision strategies used with supervised agricultural experience programs was, "Agricultural education teachers should supervised students' supervised agricultural experience programs during the summer months as a part of their extended contacts." The lowest rated statement regarding supervision strategies used with supervised agricultural experience programs was, "Students and their supervised agricultural experience programs should be visited only during the summer."

Scores from all 15 statements for each respondent were added together to determine his/her overall philosophy score regarding supervision strategies used with supervised agricultural experience programs. The average overall philosophy score regarding supervision strategies was 47.94 with a standard deviation of 4.73. The overall philosophy score regarding supervision strategies used with supervised agricultural experience programs could range from 15 to 60 with a midpoint of 37.5.

Since the average overall philosophy score for respondents in the study was 47.94, this indicated that respondents had a positive philosophy regarding supervision strategies used with supervised agricultural experience programs. Low standard deviation scores on the individual philosophy statements regarding supervision strategies used with supervised agricultural experience programs indicated that respondents were in agreement with regard to supervision strategies used with supervised agricultural experience programs.

Relationships Between Agricultural Education Teacher Philosophies Regarding the Importance of Supervised Agricultural Experience Programs and Agricultural Education Teacher Demographic Characteristics

The fifth research question to be answered in the study was: What relationships existed between Tennessee agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs and agricultural education teacher demographic characteristics? Data in Table 6 describe relationships between agricultural education teacher overall philosophy scores regarding the importance of supervised agricultural experience programs listed in Table 3 and nominally scaled demographic variables.

As reported in Table 6, significant relationships did not exist between agricultural education teacher overall philosophy scores regarding the importance of supervised agricultural experience programs and the following nominally scaled demographic variables: (a) teach semester courses in agricultural education ($t = -.39$, $p = .698$), (b) TVATA member ($t = 1.12$, $p = .266$), (c) NVATA member ($t = .29$, $p = .772$), (d) attended agricultural education teachers conference this past summer ($t =$

TABLE 6. Relationships Between Tennessee Agricultural Education Teacher Overall Philosophy Scores Regarding the Importance of Supervised Agricultural Experience Programs and Nominally Scaled Demographic Variables

Demographic Variable Level	n	$\bar{x}$	s.d.	t	p
Number of Teachers in Department					
One	63	62.84	6.60	-2.15	.034
Two or more	44	65.68	6.90		
Teach Semester Courses in Agricultural Education					
Yes	63	63.79	7.25	-.39	.698
No	44	64.32	6.27		
TVATA Member					
Yes	104	64.13	6.87	1.12	.266
No	3	59.67	4.04		
NVATA Member					
Yes	77	64.13	6.86	.29	.772
No	30	63.70	6.87		
Current Subscriber to <u>The Agricultural Education Magazine</u>					
Yes	36	66.67	6.00	2.97	.004
No	71	62.66	6.88		
Attended Agricultural Education Teachers Conference This Past Summer					
Yes	98	64.19	6.89	.92	.359
No	9	62.00	6.19		
Length of Teaching Contract					
Less than 12 months	13	62.00	5.97	-1.13	.260
12 months	94	64.29	6.93		

TABLE 6. (continued)

Demographic Variable Level	n	$\bar{x}$	s.d.	t	p
Enrolled in Agricultural Education Courses While a High School Student					
Yes	85	63.99	6.74	-.06	.950
No	22	64.09	7.37		
Conducted a Supervised Experience Program While in High School					
Yes	80	64.08	6.67	.96	.339
No	4	60.75	8.66		
Supervised Agricultural Experience Program Was Part of Your Grade in Agricultural Education					
Yes	59	64.75	7.03	1.91	.060
No	24	61.67	5.60		
Supervised Agricultural Experience Program is Counted as Part of Students' Grade in Agricultural Education					
Yes	68	65.88	6.50	4.00	<.001
No	39	60.74	6.22		
Class Period During School Day to Leave and Supervise Students' Supervised Agricultural Experience Programs					
Yes	22	67.00	6.34	2.35	.021
No	85	63.24	6.78		

.92, $p = .359$), (e) length of teaching contract ($t = -1.13$, $p = .260$), (f) enrolled in agricultural education courses while a high school student ($t = -.06$, $p = .950$), (g) conducted a supervised experience program while in high school ($t = .96$, $p = .339$), and (h) supervised agricultural experience program was part of your grade in agricultural education ($t = 1.91$, $p = .060$).

There were significant relationships between agricultural education teacher overall philosophy scores regarding the importance of supervised agricultural experience programs and the following nominally scaled demographic variables: (a) number of teachers in the department ($t = -2.15$, $p = .034$), (b) current subscriber to The Agricultural Education Magazine ($t = 2.97$, $p = .004$), (c) supervised agricultural experience program is counted as part of students' grade in agricultural education ($t = 4.00$, $p < .001$) and (d) class period during school day to leave and supervise students' supervised agricultural experience programs ($t = 2.35$, $p = .021$).

These significant relationships indicate the following: (a) teachers in multiple teacher departments had a more positive philosophy regarding the importance of supervised agricultural experience programs than those teachers in single teacher departments, (b) teachers who subscribed to The Agricultural Education Magazine had a more positive philosophy regarding the importance of supervised agricultural experience programs than those who did not, (c) teachers who counted their students' supervised agricultural experience programs as part of their grade in agricultural education had a more positive philosophy regarding the importance of supervised agricultural experience programs than those who did not, and (d) those teachers who

had a class period during school day to leave and supervise students' supervised agricultural experience programs had a more positive philosophy regarding the importance of supervised agricultural experience programs than those who did not.

Data in Table 7 describe the relationships between agricultural education teacher overall philosophy scores regarding the importance of supervised agricultural experience programs listed in Table 3 and intervally scaled demographic variables. These relationships were explained using Pearson correlation coefficients. Correlations were interpreted using Davis's convention. According to Davis (1971), the magnitude of correlations should be interpreted as follows:

1.0	Perfect Correlation
.70 - .99	Very High Correlation
.50 - .69	Substantial Correlation
.30 - .49	Moderate Correlation
.10 - .29	Low Correlation
.00 - .09	Negligible Correlation

Responses on the different levels of training were computed into one intervally scaled variable called "training score". Training score values could range from one to four. Calculated training scores represented the following: 1 = completed one type of training, 2 = completed two types of training, 3 = completed three types of training, and 4 = completed all types of training.

As reported in Table 7, a moderate positive relationship existed between agricultural education teacher overall philosophy scores regarding the importance of supervised agricultural experience programs and the total number of students enrolled in the agricultural education program last year conducting supervised agricultural experience programs ($r = .38$). Approximately 14 percent of the variance in overall

TABLE 7. Relationships Between Tennessee Agricultural Education Teacher Overall Philosophy Scores Regarding the Importance of Supervised Agricultural Experience Programs and Intervally Scaled Demographic Variables

Demographic Variable	r	r ²
Number of Years Teaching Agricultural Education	.10	.01
Age	.09	<.01
Total Number of Students Enrolled in Agricultural Education Program Last Year	.18	.03
Total Number of Students in Program Last Year Conducting Supervised Agricultural Experience Programs	.38	.14**
Total Number of Days Spent Teaching First Year Agricultural Education Students About Supervised Agricultural Experience Programs	.26	.07**
Total Number of Days Spent Teaching Other Agricultural Education Students About Supervised Agricultural Experience Programs	.21	.04*
Total Number of Days Spent During School Year and Summer Months Supervising Students' Supervised Agricultural Experience Programs	.25	.06**
Total Amount of Training Teacher Has Received About Supervised Agricultural Experience Programs	.25	.06*

* $p \leq .05$

** $p \leq .01$

philosophy scores regarding the importance of supervised agricultural experience programs was attributed to the total number of students enrolled in agricultural education courses.

There were low positive relationships between agricultural education teacher overall philosophy scores regarding the importance of supervised agricultural experience programs and the following intervally scaled demographic variables: (a) number of years teaching agricultural education ($r = .10$), (b) total number of students enrolled in the agricultural education program last year ($r = .18$), (c) total number of days spent teaching first year agricultural education students about supervised agricultural experience programs ($r = .26$), (d) total number of days spent teaching other students about supervised agricultural experience programs ($r = .21$), (e) total number of days spent during school year and summer months supervising students' supervised agricultural experience programs ($r = .25$), and (f) total amount of training teacher has received about supervised agricultural experience programs ($r = .25$). However, even the strongest of these relationships only accounted for 7 percent of the variance in overall philosophy scores regarding the importance of supervised agricultural experience programs.

Results indicated there was a negligible positive relationship between agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs and age ($r = .09$). This relationship accounted for less than 1 percent of the variance in overall philosophy scores regarding the importance of supervised agricultural experience programs.

Relationships Between Agricultural Education Teacher Philosophies Regarding Planning Activities For Supervised Agricultural Experience Programs and Agricultural Education Teacher Demographic Characteristics

The sixth research question to be answered in this study was: What relationships existed between Tennessee agricultural education teacher philosophies regarding planning activities for supervised agricultural experience programs and agricultural education teacher demographics? Data in Table 8 describe the relationships between agricultural education teacher overall philosophy scores regarding planning activities for supervised agricultural experience programs listed in Table 4 and nominally scaled demographic variables.

As reported in Table 8, significant relationships did not exist between agricultural education teacher overall philosophy scores regarding planning activities for supervised agricultural experience programs and the following nominally scaled demographic variables: (a) teach semester courses in agricultural education ($t = .11$, $p = .910$), (b) TVATA member ($t = .36$, $p = .723$), (c) NVATA member ($t = .65$, $p = .517$), (d) attended agricultural education teachers conference this past summer ($t = .25$, $p = .805$), (e) length of teaching contract ($t = -1.45$, $p = .150$), (f) enrolled in agricultural education courses while a high school student ($t = .22$, $p = .827$), (g) conducted a supervised experience program while in high school ($t = .30$, $p = .764$), (h) supervised agricultural experience program was part of your grade in agricultural education ($t = 1.95$, $p = .055$), and (i) class period during school day to leave and supervise students' supervised agricultural experience programs ($t = 1.20$, $p = .233$).

Significant relationships existed between agricultural education teacher overall

TABLE 8. Relationships Between Tennessee Agricultural Education Teacher Overall Philosophy Scores Regarding Planning Activities For Supervised Agricultural Experience Programs and Nominally Scaled Demographic Variables

Demographic Variable Level	n	$\bar{x}$	s.d.	t	p
Number of Teachers in Department					
One	63	30.06	3.69	-2.34	.021
Two or more	44	31.68	3.24		
Teach Semester Courses in Agricultural Education					
Yes	63	30.76	3.70	.11	.910
No	44	30.68	3.47		
TVATA Member					
Yes	104	30.75	3.62	.36	.723
No	3	30.00	2.65		
NVATA Member					
Yes	77	30.87	3.65	.65	.517
No	30	30.37	3.46		
Current Subscriber to <u>The Agricultural Education Magazine</u>					
Yes	36	31.94	3.72	2.56	.012
No	71	30.11	3.38		
Attended Agricultural Education Teachers Conference This Past Summer					
Yes	98	30.76	3.60	.25	.805
No	9	30.44	3.64		
Length of Teaching Contract					
Less than 12 months	13	29.38	2.66	-1.45	.150
12 months	94	30.91	3.67		

TABLE 8. (continued)

Demographic Variable Level	n	$\bar{x}$	s.d.	t	p
Enrolled in Agricultural Education Courses While a High School Student					
Yes	85	30.78	3.31	.22	.827
No	22	30.55	4.61		
Conducted a Supervised Experience Program While in High School					
Yes	80	30.76	3.33	.30	.764
No	4	30.25	3.20		
Supervised Agricultural Experience Program Was Part of Your Grade in Agricultural Education					
Yes	59	31.17	3.53	1.95	.055
No	24	29.63	2.50		
Supervised Agricultural Experience Program is Counted as Part of Students' Grade in Agricultural Education					
Yes	68	31.31	3.89	2.46	.016
No	39	29.72	2.76		
Class Period During School Day to Leave and Supervise Students' Supervised Agricultural Experience Programs					
Yes	22	31.55	3.41	1.20	.233
No	85	30.52	3.62		

philosophy scores regarding planning activities for supervised agricultural experience programs and the following nominally scaled demographic variables: (a) number of teachers in the department ($t = -2.40$, $p = .021$), (b) current subscriber to The Agricultural Education Magazine ($t = 2.56$, $p = .012$), and (c) supervised agricultural experience program is counted as part of students' grade in agricultural education today ($t = 2.46$, $p = .016$).

These significant relationships indicated the following: (a) teachers in multiple teacher departments had a more positive philosophy regarding planning activities for supervised agricultural experience programs than those teachers in single teacher departments, (b) teachers who subscribed to The Agricultural Education Magazine had a more positive philosophy regarding planning activities for supervised agricultural experience programs than those who did not, and (c) teachers who counted their students' supervised agricultural experience programs as part of their grade in agricultural education had a more positive philosophy regarding planning activities for supervised agricultural experience programs than those who did not.

Data in Table 9 describe relationships between agricultural education teacher overall philosophy scores regarding planning activities for supervised agricultural experience programs listed in Table 4 and intervally scaled demographic variables.

As reported in Table 9, moderate positive relationships existed between agricultural education teacher overall philosophy scores regarding planning activities for supervised agricultural experience programs and the following intervally scaled demographic variables: (a) total number of days spent teaching first year agricultural

TABLE 9. Relationships Between Tennessee Agricultural Education Teacher Overall Philosophy Scores Regarding Planning Activities For Supervised Agricultural Experience Programs and Intervally Scaled Demographic Characteristics

Demographic Variable	r	r ²
Number of Years Teaching Agricultural Education	.04	<.01
Age	.08	<.01
Total Number of Students Enrolled in Agricultural Education Program Last Year	.27	.07**
Total Number of Students in Program Last Year Conducting Supervised Agricultural Experience Programs	.27	.07**
Total Number of Days Spent Teaching First Year Agricultural Education Students About Supervised Agricultural Experience Programs	.38	.14**
Total Number of Days Spent Teaching Other Agricultural Education Students About Supervised Agricultural Experience Programs	.30	.09
Total Number of Days Spent During School Year and Summer Months Supervising Students' Supervised Agricultural Experience Programs	.34	.12
Total Amount of Training Teacher Has Received About Supervised Agricultural Experience Programs	.19	.04*

* $p \leq .05$

** $p \leq .01$

education students about supervised agricultural experience programs ($r = .38$), (b) total number of days spent teaching other agricultural education students about supervised agricultural experience programs ($r = .30$), and (c) total number of days spent during the school year and summer months supervising students' supervised agricultural experience programs ($r = .34$). Approximately 14 percent of the variance in overall philosophy scores regarding planning activities for supervised agricultural experience programs was attributed to the total number of days spent teaching first year students about supervised agricultural experience programs. Approximately 9 percent of the variance in overall philosophy scores was attributed to the total number of days teaching other students about supervised agricultural experience programs. Approximately 12 percent of the variance in overall philosophy scores was attributed to the total number of days spent supervising students' supervised agricultural experience programs.

Low positive relationships existed between agricultural education teacher overall philosophy scores regarding planning activities for supervised agricultural experience programs and the following intervally scaled demographic variables: (a) total number of students enrolled in the agricultural education program last year ($r = .27$), (b) total number of students enrolled in agricultural education programs last year conducting supervised agricultural experience programs ($r = .27$) and (c) total amount of training teacher has received about supervised agricultural experience programs ($r = .19$). However, even the strongest of these relationships only accounted for 7 percent of the variance in overall philosophy scores regarding planning activities for supervised

agricultural experience programs.

Results indicated there were negligible positive relationships between agricultural education teacher overall philosophy scores regarding planning activities for supervised agricultural experience programs and the following intervally scaled demographic variables: (a) number of years teaching agricultural education ($r = .04$) and (b) age ($r = .08$). These relationships both accounted for less than 1 percent of the variance in overall philosophy scores regarding planning activities for supervised agricultural experience programs.

Relationships Between Agricultural Education Philosophies Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs and Agricultural Education Teacher Demographic Characteristics

The seventh and final research question to be answered in this study was: What relationships existed between Tennessee agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs and agricultural education teacher demographic characteristics? Data in Table 10 describe the relationships between agricultural education teacher overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs listed in Table 5 and nominally scaled demographic variables.

As reported in Table 10, significant relationships did not exist between agricultural education teacher overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs and the following nominally scaled demographic variables: (a) number of teachers in the department ($t = -1.84$, $p = .068$), (b) teach semester courses in agricultural education ($t = -.20$, $p = .841$),

TABLE 10. Relationships Between Tennessee Agricultural Education Teacher Overall Philosophy Scores Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs and Nominally Scaled Demographic Variables

Demographic Variables Level	n	$\bar{x}$	s.d.	t	p
Number of Teachers in Department					
One	63	47.24	4.73	-1.84	.068
Two or more	44	48.93	4.60		
Teach Semester Courses in Agricultural Education					
Yes	63	47.86	4.94	-.20	.841
No	44	48.05	4.47		
TVATA Member					
Yes	104	48.03	4.76	1.22	.227
No	3	44.67	1.16		
NVATA Member					
Yes	77	42.67	4.81	-.91	.366
No	30	48.60	4.53		
Current Subscriber to <u>The Agricultural Education Magazine</u>					
Yes	36	49.06	4.99	1.76	.081
No	71	47.37	4.53		
Attended Agricultural Education Teachers Conference This Past Summer					
Yes	98	48.06	4.73	.91	.363
No	9	46.56	4.83		
Length of Teaching Contract					
Less than 12 months	13	46.85	4.81	-.88	.379
12 months	94	48.04	4.73		

TABLE 10. (continued)

Demographic Variable Level	n	$\bar{x}$	s.d.	t	p
Enrolled in Agricultural Education Courses While a High School Student					
Yes	85	47.47	4.52	-2.02	.046
No	22	49.73	5.19		
Conducted a Supervised Experience Program While in High School					
Yes	80	47.48	4.33	1.09	.278
No	4	45.00	6.38		
Supervised Agricultural Experience Program Was Part of Your Grade in Agricultural Education					
Yes	59	47.66	4.47	1.04	.301
No	24	46.54	4.38		
Supervised Agricultural Experience Program is Counted as Part of Students' Grade in Agricultural Education					
Yes	68	48.74	4.69	2.36	.020
No	39	46.54	4.52		
Class Period During School Day to Leave and Supervise Students' Supervised Agricultural Experience Programs					
Yes	22	50.23	5.05	2.62	.010
No	85	47.34	4.49		

(c) TVATA member ($t = 1.22$, $p = .227$), (d) NVATA member ($t = -.91$, $p = .366$), (e) current subscriber to The Agricultural Education Magazine ($t = 1.76$, $p = .081$), (f) attended agricultural education teachers conference this past summer ($t = .91$, $p = .363$), (g) length of teaching contract ($t = -.88$, $p = .379$), (h) conducted a supervised experience program while in high school ($t = 1.09$, $p = .278$), and (i) supervised agricultural experience program was part of your grade in agricultural education ($t = 1.04$, $p = .301$).

Significant relationships existed between agricultural education teacher overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs and the following nominally scaled demographic variables: (a) enrolled in agricultural education courses while a high school student ($t = -2.02$, $p = .046$), (b) supervised agricultural experience program is counted as part of students' grade in agricultural education ($t = 2.36$, $p = .020$), and (c) class period during school day to leave and supervise students' supervised agricultural experience programs ($t = 2.62$, $p = .010$).

These significant relationships indicated the following: (a) teachers who did not enroll in agricultural education courses while high school students had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs than those who did not, (b) teachers who counted their students' supervised agricultural experience programs as part of their grade in agricultural education had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs than those who did not, and (c) teachers who had a

class period during the school day to leave and supervise students' supervised agricultural experience programs had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs than those who did not.

Data in Table 11 describe the relationships between agricultural education teacher overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs listed in Table 5 and intervally scaled demographic variables.

As reported in Table 11, a moderate positive relationship existed between agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs and the total number of days spent during the school year and summer months supervising students' supervised agricultural experience programs ($r = .30$). Approximately 9 percent of the variance in overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs was attributed to the total number of days spent supervising students.

Low positive relationships existed between agricultural education teacher overall philosophy scores regarding supervision strategies used with supervised agricultural experience programs and the following intervally scaled demographic variables: (a) number of years teaching agricultural education ($r = .13$), (b) age ($r = .18$), (c) total number of students enrolled in agricultural education program last year ($r = .19$), (d) total number of students in program last year conducting supervised agricultural experience programs ($r = .16$), (e) total number of days spent teaching first year

TABLE 11. Relationships Between Tennessee Agricultural Education Teacher Overall Philosophy Scores Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs and Intervally Scaled Demographic Variables

Demographic Variables	r	r ²
Number of Years Teaching Agricultural Education	.13	.02
Age	.18	.03
Total Number of Students Enrolled in Agricultural Education Program Last Year	.19	.04
Total Number of Students in Program Last Year Conducting Supervised Agricultural Experience Programs	.16	.03
Total Number of Days Spent Teaching First Year Agricultural Education Students About Supervised Agricultural Experience Programs	.28	.08**
Total Number of Days Spent Teaching Other Agricultural Education Students About Supervised Agricultural Experience Programs	.29	.08**
Total Number of Days Spent During School Year and Summer Months Supervising Students Supervised Agricultural Experience Programs	.30	.09**
Total Amount of Training Teacher Has Received About Supervised Agricultural Experience Programs	.10	.01

** $p \leq .01$

agricultural education students about supervised agricultural experience programs ($r = .28$), (f) total number of days spent teaching other agricultural education students about supervised agricultural experience programs ($r = .29$), and (g) total amount of training teacher has received about supervised agricultural experience programs ($r = .10$). However, even the strongest of these relationships only accounted for 8 percent of the variance in overall philosophy scores.

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CHAPTER V

SUMMARY OF MAJOR FINDINGS

Statement of the Problem

Agricultural education has changed from traditional production programs to more innovative and specialized programs. These programs are attracting more students, especially non-traditional students, into agricultural education. Traditional programs of agricultural education and supervised agricultural experience prepared students for production oriented careers. As more specialized courses are offered, it becomes necessary to identify ways of preparing students for new and different careers in agriculture. Before students can be prepared for new careers in agriculture, it must be determined if supervised agricultural experience programs are still valuable in preparing students today for such careers. Since the trend of the future will be to offer more specialized courses in agricultural education and this will affect the types of supervised agricultural experiences of students enrolling in these courses, the problem can be stated: What are the attitudes and philosophies of Tennessee agricultural education teachers regarding various aspects of supervised agricultural experience programs?

Purpose and Research Questions

The purpose of the study was to describe the attitudes and philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs for all students in agricultural education, even those enrolled in

specialized semester courses. The following research questions were developed to direct the study:

1. What were the demographic characteristics of agricultural education teachers in Tennessee?
2. What were the philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs for students?
3. What were the philosophies of Tennessee agricultural education teachers regarding planning strategies for supervised agricultural experience programs?
4. What were the philosophies of Tennessee agricultural education teachers regarding supervision strategies used with supervised agricultural experience programs?
5. What relationships existed between Tennessee agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs and agricultural education teacher demographic characteristics?
6. What relationships existed between Tennessee agricultural education teacher philosophies regarding planning activities for supervised agricultural experience programs and agricultural education teacher demographic characteristics?
7. What relationships existed between Tennessee agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs and agricultural education teacher demographics characteristics?

Limitations

The study was limited to all Tennessee agricultural education teachers who had taught agricultural education for at least one year in Tennessee.

Sample for the Study

The population for the study consisted of all agricultural education teachers who

had taught agricultural education at least one year in Tennessee. The sample was drawn from information provided by the Vocational Education Department, Tennessee State Department of Education. According to this information, there were 225 agricultural education teachers at the beginning of the 1993-94 school year who had taught agricultural education in Tennessee for at least one year. Using a formula from McCall (1982), the researcher found the sample size should be 142 agricultural education teachers. The formula was:

$$n = p (1 - p) / [(e^2 / Z^2) + p (1 - p) / N] \text{ (McCall, 1982: p. 194).}$$

After determining the sample size, each teacher was assigned a number. Using a random number procedure, 142 agricultural education teachers were selected for their participation in the study. To increase the possibility of having a 95 percent confidence level, the sample was increased to include 150 agricultural education teachers.

Instrumentation

The instrument used in the study was a four-part questionnaire. Part one asked for demographic data of agricultural education teachers. Part two contained 20 Likert-type statements regarding the importance of supervised agricultural experience programs. Part three contained 10 Likert-type statements regarding planning activities of supervised agricultural experience programs. Part four contained 15 Likert-type statements regarding supervision strategies used with supervised agricultural experience programs. The scale of measurement for Likert-type statements was: 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The questionnaire was reviewed by the researcher's graduate committee and then it was sent to the Human Subjects Committee

at The University of Tennessee for approval. After receiving approval from the Human Subjects Committee, the instrument was pilot tested using 25 agricultural education teachers who were not selected to be part of the sample. Reliability coefficients were considered acceptable. Some questions were reworded to improve the validity of the survey instrument.

Data Collection Procedures

Agricultural education teachers selected for the study were mailed a copy of a numbered questionnaire, a list of definitions relevant to the study and a self-addressed stamped envelope for returning the questionnaire to the researcher. A cover letter from the researcher and the researcher's major advisor explaining the purpose of the study accompanied each questionnaire. Appropriate follow-up procedures were used in the study. The overall usable response rate was 71.3 percent.

Data Analysis

Data for the study were analyzed using the Statistical Package for the Social Sciences (SPSS Release 4.1) on the IBM 3081 mainframe computer at The University of Tennessee Computing Center. Alpha levels were established .05 a priori.

Data were reported using appropriate descriptive statistics and inferential tests. Student's t-tests were used to determine if significant differences existed between nominally scaled independent variables and dependent variables. Pearson correlation coefficients were used to describe the magnitude of relationships between intervally scaled independent variables and dependent variables.

Major Findings

The findings of the study are reported to coincide with the research questions in Chapter IV. Below is a summary of the research questions answered in the study.

Research question 1: What were the demographic characteristics of agricultural education teachers in Tennessee?

The study revealed 58.9 percent of agricultural education teachers taught in single teacher departments while 41.1 percent taught in multiple teacher departments (two or more teachers). The average agricultural education teacher was approximately 41 years old and had 15.55 years of teaching experience in agricultural education. A majority of agricultural education teachers (58.9 percent) taught specialized semester courses in agricultural education. Also, a majority of agricultural education teachers (87.9 percent) were employed on 12 month teaching contracts. The rest of agricultural education teachers (12.1 percent) were either on nine, ten, or eleven month teaching contracts.

During the 1992-1993 school year, the average agricultural education program in Tennessee had approximately 124 students enrolled in agricultural education courses. In these programs, an average of approximately 73 students conducted supervised agricultural experience programs. Approximately 64 percent of agricultural education teachers counted their students' supervised agricultural experience programs as part of their grade in agricultural education while 36 percent did not.

To assist in planning students' supervised agricultural experience programs, agricultural education teachers spent 11.03 days teaching first year agricultural education students about selecting, planning, and conducting supervised agricultural experience programs. Agricultural education teachers spent only 8.63 days last school year teaching

other agricultural education students about selecting, planning, and conducting supervised agricultural experience programs.

To evaluate students' supervised agricultural experience programs, agricultural education teachers spent approximately 33 days during the school year and summer months supervising their students'. Only 21 percent of agricultural education teachers had a class period during the school day to leave and supervise students' supervised agricultural experience programs.

Agricultural education teachers were involved in many professional activities to keep up-to-date about supervised agricultural experience programs. Approximately 97 percent of agricultural education teachers were members of the Tennessee Vocational Agriculture Teachers Association (TVATA). Seventy-two percent were members of the National Vocational Agricultural Teachers Association. Only 33.6 percent subscribed to the monthly professional journal of agricultural education, The Agricultural Education Magazine. Approximately 92 percent of agricultural education teachers attended this past summer's agricultural education teachers conference.

In asking agricultural education teachers about their high school agricultural education backgrounds, 79.4 percent of them were enrolled in agricultural education courses while high school students. Approximately 75 percent of agricultural education teachers conducted supervised experience programs while in high school. Only 55.2 percent of agricultural education teachers had their supervised agricultural experience programs count as part of their grade in agricultural education while in high school.

Agricultural education teachers have received various types of training regarding

supervised agricultural experience programs. Approximately 93 percent of agricultural education teachers have completed an undergraduate college course on supervised agricultural experience programs. Approximately 67 percent of agricultural education teachers have completed a graduate level college course on supervised agricultural experience programs. Eighty-three percent of agricultural education teachers have attended various workshops on supervised agricultural experience programs. Approximately 8 percent of agricultural education teachers have completed other types of training on supervised agricultural experience programs. Their responses included their years of teaching experience and state conferences they have attended.

Research question 2: What were the philosophies of Tennessee agricultural education teachers regarding the importance of supervised agricultural experience programs for students?

Agricultural education teachers had a positive philosophy regarding the importance of supervised agricultural experience programs. Average scores on individual philosophy statements regarding the importance of supervised agricultural experience programs ranged from 1.62 to 3.64 on a scale of 1 to 4 with 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The five highest rated philosophy statements regarding the importance of supervised agricultural experience programs were:

- (1) "Supervised agricultural experience programs should be based on the educational philosophy of learning by doing" ($\bar{x} = 3.64$, s.d. = .48);
- (2) "All students that conduct supervised agricultural experience programs should be encouraged to keep records on their program" ($\bar{x} = 3.58$, s.d. = .50);
- (3) "Supervised agricultural experience should be a valuable component of agricultural education programs today" ($\bar{x} = 3.45$, s.d. = .55);

- (4) "Supervised agricultural experience programs are an essential component of the total agricultural education program" ($\bar{x} = 3.42$, s.d. = .65);
- (5) "Topics on supervised agricultural experience should be taught to prospective agricultural education teachers" ($\bar{x} = 3.33$, s.d. = .51); and
- (5) "Student teachers should supervise students' supervised agricultural experience programs while student teaching" ($\bar{x} = 3.33$, s.d. = .51).

Scores from all 20 individual statements were added together to determine an agricultural education teacher's overall philosophy score regarding the importance of supervised agricultural experience programs. The range of these scores could be from 20 to 80 with a midpoint of 50. The average overall philosophy score regarding the importance of supervised agricultural experience programs was 64.09. This score indicated that agricultural education teachers possessed a relatively positive overall philosophy regarding the importance of supervised agricultural experience programs.

Research question 3: What were the philosophies of Tennessee agricultural education teachers regarding planning activities for supervised agricultural experience programs?

Agricultural education teachers had a positive philosophy regarding the types of planning activities used when planning students' supervised agricultural experience programs. Average scores on individual philosophy statement scores regarding planning activities for supervised agricultural experience programs ranged from 2.70 to 3.34 on a scale of 1 to 4 with 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The five highest rated philosophy statements regarding planning activities for supervised agricultural experience programs were:

- (1) "Agricultural education instructors should help students plan and carry out worthwhile supervised agricultural experience programs" ($\bar{x} = 3.34$, s.d. = .53);

- (2) "Parents should be involved in helping plan their child's supervised agricultural experience program" ($\bar{x} = 3.23$, s.d. = .51);
- (3) "Students should have written plans for conducting their supervised agricultural experience programs" ($\bar{x} = 3.20$), s.d. = .52);
- (4) "Real problems encountered by students in their supervised agricultural experience programs should be used as topics for classroom instruction" ($\bar{x} = 3.20$, s.d. = .44); and
- (5) "Class time should be used to update record books" ($\bar{x} = 3.05$, s.d. = .62).

Scores from all 10 individual statements were added together to determine an agricultural education teacher's overall philosophy score regarding planning activities for supervised agricultural experience programs. The range of these scores could be from 10 to 40 with a midpoint of 25. The average overall philosophy score regarding planning activities for supervised agricultural experience programs was 30.73. This score indicated that agricultural education teachers possessed a positive philosophy regarding planning activities used when planning students' supervised agricultural experience programs.

Research question 4: What were the philosophies of Tennessee agricultural education teachers regarding supervision strategies used with supervised agricultural experience programs?

Agricultural education teachers had a positive philosophy regarding supervision strategies used when supervising students' supervised agricultural experience programs. Average scores on individual philosophy statements regarding supervision strategies used with supervised agricultural experience programs ranged from 1.85 to 3.59 on a scale of 1 to 4 with 1 = strongly disagree, 2 = disagree, 3 = agree, and 4 = strongly agree. The five highest rated philosophy statements regarding supervision strategies used with

supervised agricultural experience programs were:

- (1) "Agricultural education teachers should supervise students' supervised agricultural experience programs during the summer months as a part of their extended contract" ($\bar{x} = 3.59$, s.d. = .49);
- (2) "Supervised agricultural experience programs must be supervised during the summer months as well as during the school year" ($\bar{x} = 3.48$, s.d. = .45);
- (3) "Teachers should conduct on-site supervisory visits at students' homes, farms, and workplaces" ($\bar{x} = 3.34$, s.d. = .51);
- (4) "For supervision to be effective, teachers need to make on-site supervisory visits" ($\bar{x} = 3.32$, s.d. = .59); and
- (5) "Supervision should be used as a teaching/learning opportunity" ($\bar{x} = 3.31$, s.d. = .46).

Scores from all 15 individual statements were added together to determine an agricultural education teacher's overall philosophy score regarding supervision strategies used with supervised agricultural experience programs. The range of these scores could be from 15 to 60 with a midpoint of 37.5. The average overall philosophy score regarding supervision strategies used with supervised agricultural experience programs was 47.94. This score indicated that agricultural education teachers possessed a positive philosophy regarding supervision strategies used when supervising students' supervised agricultural experience programs.

Research question 5: What relationships existed between Tennessee agricultural education teacher philosophies regarding the importance of supervised agricultural experience programs and agricultural education teacher demographic characteristics?

A significant relationship existed between number of teachers in the agricultural education department and agricultural education teachers overall philosophy regarding the

importance of supervised agricultural experience programs. Agricultural education teachers in multiple teacher departments had a more positive philosophy regarding the importance of supervised agricultural experience programs ($\bar{x} = 65.68$, s.d. = 6.90) than did those agricultural education teachers in single teacher departments ($\bar{x} = 62.84$, s.d. = 6.60) ($t = -2.15$, $p = .034$).

A significant relationship existed between whether agricultural education teachers were current subscribers to The Agricultural Education Magazine and agricultural education teachers overall philosophy regarding the importance of supervised agricultural experience programs. Agricultural education teachers who were current subscribers to The Agricultural Education Magazine had a more positive philosophy regarding the importance of supervised agricultural experience programs ($\bar{x} = 66.67$, s.d. = 6.00) than those who did not receive the magazine ($\bar{x} = 62.66$, s.d. = 6.88) ($t = 2.97$, $p = .004$).

There was a significant relationship between counting students' supervised agricultural experience program as part of their grade in agricultural education and agricultural education teachers overall philosophy regarding the importance of supervised agricultural experience programs. Agricultural education teachers who counted their students' supervised agricultural experience programs as part of their grade in agricultural education had a more positive philosophy regarding the importance of supervised agricultural experience programs ($\bar{x} = 65.88$, s.d. = 6.50) than agricultural education teachers who did not ($\bar{x} = 60.77$, s.d. = 6.22) ($t = 4.00$, $p < .001$).

A significant relationship existed between having a class period during the school day to leave school and supervise students' supervised agricultural experience programs

and agricultural education teachers overall philosophy regarding the importance of supervised agricultural experience programs. Agricultural education teachers who had this period for supervision had a more positive philosophy regarding the importance of supervised agricultural experience programs ($\bar{x} = 67.00$, s.d. = 6.34) than agricultural education who did not have this period ($\bar{x} = 63.24$, s.d. = 6.78) ($t = 2.35$, $p = .021$).

There was a moderate positive relationship between total number of students in agricultural education programs conducting supervised agricultural experience programs last school year and agricultural education teachers overall philosophy regarding the importance of supervised agricultural experience programs ($r = .38$). This relationship accounted for approximately 14 percent of the variance in overall philosophy scores regarding the importance of supervised agricultural experience programs.

Research question 6: What relationships existed between Tennessee agricultural education teacher philosophies regarding planning activities for supervised agricultural experience programs and agricultural education teacher demographics?

There was a significant relationship between number of teachers in the agricultural education department and agricultural education teachers overall philosophy regarding planning activities for supervised agricultural experience programs. Agricultural education teachers in multiple teacher departments had a more positive philosophy about planning activities used for supervised agricultural experience programs ($\bar{x} = 31.68$, s.d. = 3.24) than agricultural education teachers in single teacher departments ($\bar{x} = 30.06$, s.d. = 3.69) ($t = -2.40$, $p = .021$).

A significant relationship existed between subscribing to The Agricultural Education Magazine and agricultural education teachers overall philosophy regarding

planning activities for supervised agricultural experience programs. Agricultural education teachers who subscribed to The Agricultural Education Magazine had a more positive philosophy regarding planning activities for supervised agricultural experience programs ($\bar{x} = 31.94$, s.d. = 3.73) than those who did not subscribe to the magazine ($\bar{x} = 30.11$, s.d. = 3.38) ($t = 2.56$, $p = .012$).

There was a significant relationship between counting students' supervised agricultural experience programs as part of their grade in agricultural education and agricultural education teachers overall philosophy regarding planning activities for supervised agricultural experience programs. Agricultural education teachers who counted their students' supervised agricultural experience programs as part of their grade in agricultural education had more positive philosophy toward planning activities for supervised agricultural experience programs ($\bar{x} = 31.31$, s.d. = 3.89) than those who did not ($\bar{x} = 29.72$, s.d. = 2.76) ($t = 2.46$, $p = .016$).

There was a moderate positive relationship between the total number of days spent teaching first year agricultural education students about selecting, planning, and conducting supervised agricultural experience programs and agricultural education teachers overall philosophy regarding planning activities for supervised agricultural experience programs ($r = .38$). This relationship accounted for approximately 14 percent of the variance in overall philosophy scores regarding planning activities for supervised agricultural experience programs.

A moderate positive relationship existed between the total number of days spent teaching other agricultural education students about selecting, planning, and conducting

supervised agricultural experience programs and agricultural education teachers overall philosophy regarding planning activities for supervised agricultural experience programs ($r = .30$). Nine percent of the variance in overall philosophy scores regarding planning activities for supervised agricultural experience programs was attributed to the total number of days spent teaching other agricultural education students about supervised agricultural experience programs.

There was a moderate positive relationship between the total number of days spent during the school year and summer months supervising students' supervised agricultural experience programs and agricultural education teachers overall philosophy regarding planning activities for supervised agricultural experience programs ($r = .34$). This relationship accounted for approximately 12 percent of the variance in overall philosophy scores regarding planning activities for supervised agricultural experience programs.

Research question 7: What relationships existed between Tennessee agricultural education teacher philosophies regarding supervision strategies used with supervised agricultural experience programs and agricultural education teacher demographics?

There was a significant relationship between agricultural education teachers being enrolled in agricultural education courses while high school students and their overall philosophy regarding supervision strategies used with supervised agricultural experience programs. Agricultural education teachers who did not enroll in agricultural education courses while high school students had a more positive philosophy toward supervision strategies used with supervised agricultural experience programs ($\bar{x} = 49.73$, s.d. = 5.19) than those who did not enroll in such courses ($\bar{x} = 47.47$, s.d. = 4.52) ($t = 2.62$, $p = .046$).

A significant relationship existed between counting students' supervised agricultural experience programs as part of their grade in agricultural education and agricultural education teachers overall philosophy regarding supervision strategies used with supervised agricultural experience programs. Agricultural education teachers who counted their students' supervised agricultural experience programs as part of their grade in agricultural education had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs ($\bar{x} = 48.74$, s.d. = 4.69) than agricultural education teachers who did not ($\bar{x} = 46.54$, s.d. = 4.52) ($t = 2.36$, $p = .020$).

There was a significant relationship between having a class period during the school day to leave school and supervise students' supervised agricultural experience programs and agricultural education teachers overall philosophy regarding supervision strategies used with supervised agricultural experience programs. Agricultural education teachers who had this period during the school day for supervision had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs ($\bar{x} = 50.23$, s.d. = 5.05) than agricultural education teachers who did not ($\bar{x} = 47.34$, s.d. = 4.49) ($t = 2.62$, $p = .010$).

A moderate positive relationship existed between the total number of days spent during the school year and summer months supervising students' supervised agricultural experience programs and agricultural education teachers overall philosophy regarding supervision strategies used with supervised agricultural experience programs ($r = .30$). This relationship accounted for 9 percent of the variance in overall philosophy scores

regarding supervision strategies used with supervised agricultural experience programs.

Conclusions

The following conclusions were determined from the study:

1. Agricultural education teachers who had a more positive philosophy regarding the importance of supervised agricultural experience programs:
 - a) taught in multiple teacher departments;
 - b) subscribed to The Agricultural Education Magazine;
 - c) counted their students' supervised agricultural experience programs as part of their grade in agricultural education; and
 - d) had a class period during the school day to supervise students' supervised agricultural experience programs.
2. Agricultural education teachers who had a more positive philosophy regarding planning activities used with supervised agricultural experience programs:
 - a) taught in multiple teacher departments;
 - b) subscribed to The Agricultural Education Magazine; and
 - c) counted their students' supervised agricultural experience programs as part of their grade in agricultural education.
3. Agricultural education teachers who had a more positive philosophy regarding supervision strategies used when supervising students' supervised agricultural experience programs:
 - a) did not enroll in agricultural education courses while high school students;
 - b) counted their students' supervised agricultural experience programs as part of their grade in agricultural education; and
 - c) had a class period during the school day to leave and supervise students' supervised agricultural experience programs.

Implications

After analyzing data presented, agricultural education teachers had positive philosophies regarding the importance of supervised agricultural experience programs, planning activities for supervised agricultural experience programs, and supervision strategies used with supervised agricultural experience programs. If agricultural education teachers are to continue to have positive philosophies regarding these aspects of supervised agricultural experience programs or if their current philosophies regarding supervised agricultural experience programs are to be improved, then the following should be done to maintain or improve their philosophies regarding supervised agricultural experience programs:

1. If economically feasible, local school systems with agricultural education programs should consider having multiple teacher agricultural education departments. By having multiple teacher departments, agricultural education teachers can have fewer students to work with when planning and supervising their students' supervised agricultural experience programs and thus have more time to work with each individual student.
2. Agricultural education teachers should be scheduled a class period during the school day where they may leave and supervise students' supervised agricultural experience programs. With many new specialized semester courses being offered in agricultural education, the only way some students will gain supervised experience in agriculture will be through cooperative work experience and placement. If students participate in cooperative work experience programs, then agricultural education teachers must have at least one class period during the school day in order to supervise their students.
3. Students' supervised agricultural experience programs should be graded and included as part of their grade in agricultural education. Even though a majority of agricultural education teachers are currently doing so, all agricultural education teachers should consider doing this. If students' supervised agricultural experience programs are counted as part of their grade in agricultural education, then agricultural education teachers must take planning and supervision of such programs seriously. Counting

supervised agricultural experience programs as part of students' grades will make agricultural education teachers plan appropriate programs with their students and supervise them sufficiently. Teacher educators should also point out to prospective agricultural education students that those agricultural education teachers who include their students' supervised agricultural experience programs as part of their grade ion agricultural education do indeed have a more positive philosophy about supervised agricultural experience programs.

4. While those agricultural education teachers who subscribed to The Agricultural Education Magazine had a more positive philosophy regarding various aspects of supervised agricultural experience programs, their subscribing to The Agricultural Education Magazine may not influence their philosophy on supervised agricultural experience programs. Agricultural education teachers subscribing to the magazine may be supporting one aspect of professional involvement in agricultural education. The Agricultural Education Magazine at times does have articles that may assist agricultural education teachers in learning about new ways to plan, conduct, and supervised agricultural experience programs. However, it would be plausible to say that those agricultural education teachers who subscribe to The Agricultural Education Magazine will be able to keep up-to-date with changes occurring with supervised agricultural experience programs. Teacher educators should discuss subscribing to the magazine with their students and point out that those teacher who subscribe to the magazine have a more positive philosophy regarding supervised agricultural experience programs.
5. Since agricultural education teachers who did not enroll in agricultural education courses while they were high school students had a more positive philosophy regarding supervision strategies used with supervised agricultural experience programs, agricultural education teachers today should be familiar with the structure and organization of agricultural education. It is likely that those agricultural education teachers who enrolled in agricultural education courses while high school students did not have adequate supervision when conducting supervised agricultural experience programs or they did not like the way their agricultural education teacher conducted supervision of supervised agricultural experience programs. The profession is also faced with situations today where more agricultural education teachers are coming from non-traditional agricultural education backgrounds or no agricultural education background at all. If agricultural education teachers are to improve their philosophy about supervision, then they need to take supervision of their students' supervised agricultural experience programs seriously and assist them in having quality supervised agricultural experience programs.

Teacher education programs need to carefully prepare students who come from non-traditional backgrounds about supervised agricultural experience programs.

Recommendations for Further Study

If supervised agricultural experience programs are to be a part of the total agricultural education program, both now and in the future, additional research should be conducted on supervised agricultural experience programs and their related aspects.

The following are recommendations for research studies to be conducted:

- 1) A similar study should be conducted in five years to check validity of research findings in the study.
- 2) Similar studies should be conducted in other states to determine agricultural education teachers attitudes and perceptions on supervised agricultural experience programs.
- 3) A similar study should be conducted to determine students attitudes and perceptions on various aspects of supervised agricultural experience programs.
- 4) A similar study should be conducted to determine high school administrators attitudes and perceptions on various aspects of supervised agricultural experience programs.
- 5) A similar study should be conducted to determine teacher educators attitudes and perceptions on various aspects of supervised agricultural experience programs.
- 6) Additional research should be conducted to determine why there were significant relationships between certain demographic characteristics and philosophies regarding certain aspects of supervised agricultural experience programs in order to develop a theoretical base for why such relationships exist.
- 7) A study should be done to determine the kinds and types of supervised agricultural experience programs being conducted by students enrolled in specialized semester courses.

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APPENDICES

APPENDIX A

PART I

BACKGROUND INFORMATION

Background information about you, your students, and the agricultural education program are useful in understanding and interpreting your responses. Please respond to each question by checking the appropriate answer(s) or filling in the appropriate answers where indicated.

1. How many teachers of agricultural education are in your department? _____
2. Not including this school year, how many years have you taught agricultural education? _____
3. Do you teach any semester courses in agricultural education?
_____ a. yes
_____ b. no
4. What is your age? _____
5. Are you currently a member of the Tennessee Vocational Agriculture Teachers Association (TVATA)?
_____ a. yes
_____ b. no
6. Are you currently a member of the National Vocational Agriculture Teachers Association (NVATA)?
_____ a. yes
_____ b. no
7. Do you currently subscribe to the Agricultural Education Magazine?
_____ a. yes
_____ b. no
8. Did you attend the agricultural education teachers conference this past summer?
_____ a. yes
_____ b. no
9. What is the length of your annual teaching contract in months? _____
- 10A. Did you enroll in agricultural education courses while a high school student?
_____ a. yes
_____ b. no - If no, go to question #11
- 10B. Did you conduct a supervised experience program in agriculture while in high school?
_____ a. yes
_____ b. no
- 10C. Did your supervised experience program count as a part of your grade in agricultural education?
_____ a. yes
_____ b. no

11. Do you count your students' supervised experience program as a part of their grade in agricultural education?
- _____ a. yes
_____ b. no
12. How many **total** students were enrolled in the agricultural education program at your school last year? (total for you and/or any other teachers in the department) _____
13. How many **total** students conducted supervised agricultural experience programs last year in your program? (total for you and/or any other teachers in the department) _____
14. How many **total** days were spent last school year teaching **first year agricultural education students** on selecting, planning and conducting supervised agricultural experience programs? (include days spent by you and/or any other teachers in the department) _____
15. How many **total** days were spent last school year teaching other students on selecting, planning and conducting supervised agricultural experience programs? (include days spent by you and/or other teachers in the department) _____
16. Did you have a class period during the school day last year that allowed you to leave school and supervise students' supervised agricultural experience programs?
- _____ a. yes
_____ b. no
17. How many **total** days during the school year and summer months did you spend supervising students' supervised agricultural experience programs? _____
18. What type(s) of professional training have you had concerning supervised agricultural experience programs? **Check all that apply.**
- _____ a. undergraduate level college course
_____ b. graduate level college course
_____ c. workshops
_____ d. other (please list) _____

PART II
TEACHER PHILOSOPHIES

The following are statements of teacher philosophies regarding the importance of supervised agricultural experience programs. Please circle the appropriate response to the right of each item. There are no right or wrong answers. Please do not leave any question unanswered.

SA = Strongly Agree
A = Agree
D = Disagree
SD = Strongly Disagree

Example:

Agricultural education instructors should make \$ 100,000.00 per year. SA A D SD

By circling SA, it means that you strongly agree with this statement.

- | | | | | | |
|-----|--|----|---|---|----|
| 1. | The present supervised agricultural experience concept is workable with today's agricultural education programs. | SA | A | D | SD |
| 2. | Supervised agricultural experience programs should be based on the educational philosophy of learning by doing. | SA | A | D | SD |
| 3. | Supervised agricultural experience programs are an essential component of the total agricultural education program. | SA | A | D | SD |
| 4. | Supervised agricultural experience should be a valuable component of agricultural education programs today. | SA | A | D | SD |
| 5. | Supervised agricultural experience programs should relate to students' occupational goals. | SA | A | D | SD |
| 6. | An important aspect of supervised agricultural experience programs should be that they provide first hand occupational experiences in agriculture. | SA | A | D | SD |
| 7. | Supervised agricultural experience programs should be instrumental in preparing students for careers in agriculture. | SA | A | D | SD |
| 8. | Supervised agricultural experience programs make agricultural education programs vocational. | SA | A | D | SD |
| 9. | Supervised agricultural experience programs should have a lot to do with FFA degree advancement. | SA | A | D | SD |
| 10. | Opportunities for supervised agricultural experience should be discussed in every course offered in agricultural education. | SA | A | D | SD |

11.	All agricultural education students enrolled in semester agricultural education courses should be <u>encouraged</u> to conduct supervised agricultural experience programs.	SA	A	D	SD
12.	Good supervised agricultural experience programs can be conducted by <u>all</u> students enrolled in agricultural education.	SA	A	D	SD
13.	Supervised agricultural experience programs should be promoted in <u>all</u> agricultural education classes.	SA	A	D	SD
14.	All students that conduct supervised agricultural experience programs should be <u>encouraged</u> to keep records on their program.	SA	A	D	SD
15.	Students' grades in agricultural education should be based partly on on their supervised agricultural experience programs.	SA	A	D	SD
16.	Students should receive credit toward graduation for completing supervised agricultural experience programs.	SA	A	D	SD
17.	Teaching lessons on supervised agricultural experience is a waste of class time-	SA	A	D	SD
18.	Topics on supervised agricultural experience should be taught to prospective agricultural education teachers.	SA	A	D	SD
19.	Student teachers should supervise students' supervised agricultural experience programs while student teaching.	SA	A	D	SD
20.	If students lack adequate resources at home and/or farm, worthwhile supervised agricultural experience programs can be completed on school owned or school managed properties.	SA	A	D	SD

PART III

PLANNING STRATEGIES

The following are statements regarding planning strategies of supervised agricultural experience programs. Please circle the appropriate response to the right of each item. There are no right or wrong answers. Please do not leave any question unanswered.

SA = Strongly Agree
A = Agree
D = Disagree
SD = Strongly Disagree

Example:

Agricultural education instructors should help the cafeteria staff prepare lunch.

SA

A

D

SD

By circling SD, it means that you strongly disagree with this statement.

- | | | | | | |
|-----|--|----|---|---|----|
| 1. | New students enrolling in agricultural education should be visited before the school year begins. | SA | A | D | SD |
| 2. | Orientation programs on supervised agricultural experience should be presented to students and their parents at the beginning of the school year. | SA | A | D | SD |
| 3. | Students' supervised agricultural experience programs should be planned to meet their career objectives. | SA | A | D | SD |
| 4. | Parents should be involved in helping plan their child's supervised agricultural experience program. | SA | A | D | SD |
| 5. | Agricultural education instructors should help students plan and carry out worthwhile supervised agricultural experience programs. | SA | A | D | SD |
| 6. | Students should have written plans for conducting their supervised agricultural experience programs. | SA | A | D | SD |
| 7. | Class time should be used for individual supervised agricultural experience planning. | SA | A | D | SD |
| 8. | Class time should be used to update record books. | SA | A | D | SD |
| 9. | Real problems encountered by students in their supervised agricultural experience programs should be used as topics for classroom instruction. | SA | A | D | SD |
| 10. | Schools should provide adequate facilities and resources for students to use to complete supervised agricultural experience programs if students lack the appropriate resources at home and/or farm. | SA | A | D | SD |

PART IV

SUPERVISION STRATEGIES

The following are statements regarding supervision of supervised agricultural experience programs. Please circle the appropriate response to the right of each item. There are no right or wrong answers. Please do not leave any questions unanswered.

SA = Strongly Agree
A = Agree
D = Disagree
SD = Strongly Disagree

Example:

Agricultural education instructors should be certified to teach biology. SA A D SD

By circling D, it means that you disagree with this statement.

- | | | | | | |
|-----|---|----|---|---|----|
| 1. | Supervision should be used as a teaching/learning opportunity. | SA | A | D | SD |
| 2. | Supervision should motivate students to carry on successful supervised agricultural experience programs. | SA | A | D | SD |
| 3. | Students' supervised agricultural experience programs should be evaluated on a regular basis. | SA | A | D | SD |
| 4. | Students should be visited at least once per semester. | SA | A | D | SD |
| 5. | Students should be visited during each grading period. | SA | A | D | SD |
| 6. | Students should receive supervisory visits when they encounter problems with their supervised agricultural experience programs. | SA | A | D | SD |
| 7. | Supervised agricultural experience programs must be supervised during the summer months as well as during the school year. | SA | A | D | SD |
| 8. | Students and their supervised agricultural experience programs should be visited <u>only</u> during the summer. | SA | A | D | SD |
| 9. | Agricultural education teachers should supervise students' supervised agricultural experience programs during the summer months as a part of their extended contract. | SA | A | D | SD |
| 10. | Teachers should inform students of their plan for supervised agricultural experience visits ahead of time. | SA | A | D | SD |
| 11. | Teachers should talk with parents on supervisory visits. | SA | A | D | SD |

- | | | | | | |
|-----|---|----|---|---|----|
| 12. | Teachers should conduct on-site supervisory visits at students' homes, farms, and workplaces | SA | A | D | SD |
| 13. | For supervision to be effective, teachers need to make on-site supervisory visits. | SA | A | D | SD |
| 14. | School administrators should be supportive of time off during the school day for teachers to make supervisory visits. | SA | A | D | SD |
| 15. | Teachers should keep written records of students' supervisory visits. | SA | A | D | SD |

This completes the survey. Please fold and place in the enclosed return envelope.

DROP IT IN THE MAIL TODAY!

THANK YOU!

APPENDIX B

November 5, 1993

1 ~

Dear 2 ~ :

The Department of Agricultural and Extension Education at The University of Tennessee is conducting a study of teachers' perceptions about **supervised agricultural experience programs** for their students. A better understanding of your opinions about these programs will help us in our goal to prepare qualified future teachers of agricultural education in Tennessee. The reason we are writing you is to ask your help in completing this important study. Attached you will find a copy of a short questionnaire which asks your opinion regarding a number of issues related to supervised agricultural experience programs. **Please take time to complete and return the questionnaire so that your input can be included.**

You were selected to participate in our study as a member of a **random sample** of agricultural education teachers in Tennessee. Since only a few select teachers such as yourself are being asked to participate, it is **essential** that we receive your input in order to draw valid conclusions from our study. Of course your participation is completely voluntary. However, we would **greatly** appreciate your responses. Please return the completed questionnaire in the attached postage-paid envelope by **November 19**.

You will see that your questionnaire is numbered in the upper left corner. This number is to provide a way for follow-up letters to be sent, if necessary, to assure that every selected teacher has an opportunity to be included in the study. In order to limit the number of follow-up letters we must mail, we would ask that you **please return the questionnaire** even if you choose to not answer it. Doing so will allow us to remove your identification number from our list and we won't bother you again. Be assured that your name will never be linked with your identification number or identified in our study in any way. All individual responses are **strictly confidential**. The final report will contain only grouped data in aggregate form.

Thank you for taking time to read our letter. We hope you will help us in this very important study. Don't hesitate to call us at 615-974-7383 during normal business hours if you have questions or concerns. Please turn the page and read three short definitions prior to answering the questions of the survey.

Sincerely,

Kirk A. Swortzel
Graduate Teaching Assistant

John D. Todd
Professor

Enclosures

November 24, 1993

1 ~

Dear 2 ~ :

Approximately three weeks ago, you were mailed a questionnaire from our department concerning your perceptions about supervised agricultural experience programs for your students. At this time, we have not received your questionnaire back in our department. We would appreciate it if you would take some time and complete this questionnaire. Since only a few select teachers like yourself were selected to participate, it is important that we have your response to make valid conclusions from our study. Even if you do not wish to participate, please return the blank questionnaire so we can remove your name from our list.

If you have mailed the completed questionnaire back to us recently, we thank you for participating in the study. If you have not completed the questionnaire, we would appreciate the return of the questionnaire by **December 3**.

Thank you for your time. We hope you will help us in this very important study. Don't hesitate to call us at 615-974-7371 during normal business hours if you have questions or concerns.

Sincerely,

Kirk A. Swartzel
Graduate Teaching Assistant

December 6, 1993

1 ~

Dear 2 ~ :

Approximately five weeks ago, the Department of Agricultural and Extension Education at The University of Tennessee mailed you a questionnaire concerning your perceptions about **supervised agricultural experience programs** for your students. To this date, we have not received your completed questionnaire back in our department. Enclosed you will find another copy of the short questionnaire which asks your opinion regarding a number of issues related to supervised agricultural experience programs. **Please take time to complete and return the questionnaire so that your input can be included.**

Since only a few select teachers such as yourself are being asked to participate, it is **essential** that we receive your input in order to draw valid conclusions from our study. Of course your participation is completely voluntary. However, we would **greatly** appreciate your responses. Be assured that your name will never be linked with your identification number located in the upper left hand corner of the questionnaire or identified in our study in any way. All individual responses are **strictly confidential**. Please return the completed questionnaire in the enclosed postage-paid envelope by **December 19**.

Thank you for your time. We hope you will help us in this very important study. Don't hesitate to call me at 615-974-7371 during normal business hours if you have questions or concerns. Also, feel free to make comments or ask questions directly on the questionnaire if you are unsure of an answer. Please turn the page and read three short definitions prior to answering the questions of the survey.

Sincerely,

Kirk A. Swortzel
Graduate Teaching Assistant

Enclosures

Definition of Terms

To assist you in completing some questions in this questionnaire, we would like to provide you with some definitions. Please consider the specific definitions we've provided below as you answer the questions.

SUPERVISED AGRICULTURAL EXPERIENCE PROGRAM refers to any specific learning experiences that are planned and conducted by a student which contribute to the development of agricultural and personal skills. Supervised agricultural experience programs are conducted by students outside of class and laboratory instruction, or on school release time (even though they may be sometimes conducted on school property).

RECORD KEEPING refers to not only the keeping of records on production enterprises or wage earning experiences, but also on competencies and skills achieved by students.

SUPERVISION refers to your monitoring, instructing and evaluating students and their supervised agricultural experience programs.

Now, please turn the page and answer the questions on the survey.

VITA

Kirk. A. Swortzel was born on December 1, 1967 to C. Leonard and Helen B. Swortzel of Greenville, Augusta County, Virginia. He attended Riverheads High School, Staunton, Virginia, where he was a member of the Future Farmers of America (FFA), in which he served as president of his chapter and the Augusta FFA Federation his senior year, and was a member the National Honor Society. He was a recipient of the State Farmer and American Farmer Degree of the National FFA Organization. He also received scholarships to attend the American Institute of Cooperation at Purdue University in 1982 and the Washington Conference Program in 1985. He graduated from high school in 1986 as an honor graduate.

He attended Virginia Polytechnic Institute and State University in Blacksburg, Virginia, where he began studies in Agricultural Education in 1986. While at Virginia Tech, he served as secretary of the Agricultural Education Society and was chairman of the Outstanding New Teacher Committee for two years. He was the recipient of the T. J. Wakeman Scholarship in Agricultural Education, the Virginia FFA Alumni Association Scholarship, the Harry W. Sanders Scholarship in Agricultural Education, and the Powell Teaching Scholarship in the College of Education. He was appointed by the Dean of the College of Education to the Vocational-Technical Education Advisory Committee as the undergraduate student representative in 1988. He graduated from Virginia Tech in 1989.

After graduating from Virginia Tech, he was employed as agricultural education instructor and FFA advisor at Luray High School in Luray, Virginia. While in Luray, the agricultural education program excelled and the FFA program received many honors.

He was advisor/coach of the State Winning Junior Livestock Judging Team in 1991 and Dairy Judging Team at the State Dairy Field Day in 1989.

He entered The University of Tennessee in Knoxville, Tennessee in August 1992 as a graduate teaching assistant to Dr. John D. Todd in the Department of Agricultural and Extension Education. He was initiated into Gamma Sigma Delta, The Honor Society of Agriculture, and Phi Kappa Phi, The National Honor Society, in November 1993. He served on the Dean's Library Advisory Committee from 1992-1994 and was the College of Agricultural Sciences and Natural Resources Representative to the Graduate Student Association from 1993-1994. In April 1994, he was honored as the Outstanding Graduate Teaching Assistant for the College of Agricultural Sciences and Natural Resources.

He is married to the former Karen Morrow of Bolivar, Tennessee. He and his wife are expecting their first child in September 1994.

He is currently a full time graduate student in Agricultural and Extension Education at The University of Tennessee. Upon graduation, he will pursue full time graduate studies in Agricultural Education at The Ohio State University, Columbus, Ohio.