

AUTHOR Rossetti, Rosemarie; And Others
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ABSTRACT

The purpose of this study was to determine the status of middle and junior high school agricultural education and FFA (Future Farmers of America) programs. In spring 1991, questionnaires were sent to all state FFA Executive Secretaries (n=53); 52 returned questionnaires. Three teachers in each of 9 states identified as having middle or junior high agricultural education school programs were also sent questionnaires; 23 responses were received. Teachers collected information from 598 students. The scant existing information about middle school agricultural education programs was reviewed. National baseline data showed that 30 states had a middle or junior high school agricultural education program, that two-thirds of students were male, and that the majority were white and lived in the country. The following components of successful programs were identified: enthusiastic, involved teachers; support from administrators, parents, high school FFA, and community; leadership; and funding. Secretaries, teachers, and students identified the major factor influencing students' decisions to enroll in agricultural education to be the agricultural education instructor. The most often cited reasons for not enrolling in agriculture classes in high school were that students lacked interest and wanted to take other courses. Increased agricultural literacy was indicated as the major student benefit. Fewer disadvantages than advantages were reported. (The study instruments are appended.) (YLB)

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by

Rosemarie Rossetti, Assistant Professor
David Padilla, Graduate Research Assistant
N.L. McCaslin, Associate Professor

The Ohio State University
Department of Agricultural Education
202 Agricultural Administration Building
2120 Fyffe Road
Columbus, OH 43210-1099
(614) 292-6671

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INTRODUCTION

Nationally, enrollment in secondary agricultural education programs and membership in the FFA is declining. It is anticipated that if middle schools offered exploratory agricultural education programs, those students enrolled would remain in the secondary school programs. Likewise, it would be reasonable to assume that if enrollment in agricultural education increases, membership in the National FFA Organization [FFA] servicing those students would also experience an increase in membership. The population base would be increased by allowing middle school students an opportunity to enroll in the FFA. However, it is also possible that students could become disenchanted or bored with extended membership and drop out of high school programs.

The total national FFA membership for 1989 was 397,115 students, but the figures dropped to 386,069 by 1990. In 1990, there were 518,959 students enrolled in secondary agricultural education programs, with only 74.6% of the students enrolled as members of the FFA. The FFA organization had its largest membership in 1977 with 509,735 members. Membership has been on a continuous downfall since 1977. Many agricultural education instructors see middle school enrollment as a way to reverse the downward trend in secondary school enrollment. Middle school programs could serve as feeder programs for the high school agricultural education programs.

With the changes in national and state constitutions, younger members were allowed into the organization. At the 1988 National FFA convention there was a constitutional amendment passed that officially allowed middle school aged youth membership into the organization. Some states, however, do not allow middle school aged students to be members of the FFA.

PURPOSE AND OBJECTIVES

The major purpose of this study was to determine the current status of middle and junior high school agricultural education and FFA programs. The specific objectives were as follows:

1. To establish national baseline information regarding middle and junior high school enrollment in agricultural education and membership in the National FFA Organization.
2. To identify features and critical components of selected successful middle and junior high school agricultural education programs.
3. To identify factors influencing students' decisions to enroll in middle and junior high school agricultural education programs and become members in the National FFA Organization.
4. To determine why middle and junior high school students do not plan to enroll in agricultural education classes or become members of the FFA in high school.
5. To identify the perceived benefits and disadvantages of middle and junior high school agricultural education programs.

Definitions

Jackson and Bosma (1990) defined middle school as a school of some three to five years between the elementary and high school focused on the educational needs of students in the in-between years. For purpose of this study, middle and junior high school students were defined as those enrolled in grades 6, 7, and 8.

Limitations

For the teacher and student questionnaire, a special population was selected from nine states. The states were selected after discussing membership figures with Marshall Stewart at the National FFA Organization and several FFA executive secretaries. The 23 agricultural education programs in these nine states providing the teacher and student populations were selected based upon the recommendation of each of the nine state FFA executive secretaries. Programs were seen as successful because they were experiencing stable or increasing FFA membership that were geographically distributed across each state.

The results from the teacher and student questionnaires cannot be generalized to students or teachers in other parts of the nine selected states or in any other state. The results can only be generalized to the population studied.

Significance of the Problem

The information highlighted in this study will be useful to the National FFA Organization in designing new programs to support students enrolled in middle and junior high school agricultural education programs. The national baseline data supplied by the executive secretaries will be useful to determine the membership possibilities in each state. The data provided by teachers and students will be useful to those developing textbooks and curriculum materials for future programming.

Teacher education departments will be able to utilize this information as they develop new courses designed at training future teachers for the middle and junior high school agricultural education programs. Teachers would also

be interested in these results in order to encourage enrollment and improve retention rates. Teachers also will be able to take a closer look at what other teachers and students have recommended in order to have a successful program.

State departments of education will be able to compare their data with those of other states. Those states with a longer history of enrollment in middle and junior high school programs could serve as resources to states with little or no enrollment. Executive secretaries will be better able to plan a state-wide program of activities for middle and junior high school level competition and recognition in FFA programs.

REVIEW OF LITERATURE

Introduction

Vocational education in agriculture may be defined as systematic instruction in agriculture at the elementary, secondary, post-secondary, or adult level for the purpose of preparing persons for initial entry or re-entry into occupations in agriculture (Phipps & Osborne, 1988). This definition means that there are several levels in which agricultural education may be taught. However, agricultural education is most commonly found in general or comprehensive high schools. Most printed information in books, journals, and magazines is about the agricultural education programs at the secondary level. Nevertheless, in the last few years, emphasis on agricultural education programs at elementary and middle schools has been increased. Currently, over 30 states endorse through financial support, exploratory agricultural programs for junior high schools students at the local level. In 1985 over 22 percent

of all secondary agriculture instructors taught one or more junior high or middle school courses in agriculture (Phipps & Osborne, 1888).

There is little information written about agricultural education programs at the middle schools. Moreover, the information available is contradictory. Information such as: enrollment, characteristics of middle school programs, membership in the FFA, program names for middle schools, funding of programs, etc, varies in each state that have agricultural education programs at the middle school level. For example, Herren and Denham (1990) believed that a properly conducted middle school program can be an asset to the secondary program in the area of recruitment. However, Doese and Miller (1988) in their research "Factors Affecting the Future Enrollment of Students in Vocational Agriculture", concluded that vocational agriculture enrollments will be suffering in the 1988-89 school year as well as later. According to Doese and Miller, the majority of the 8th grade students are not planning on enrolling in vocational agriculture their freshman year.

Also, agriculture courses at middle schools vary in length from 6 weeks to a full year. For instance, in Georgia the length of courses are 6 to 8 weeks, but in Florida, Wyoming, Nevada, New Mexico, Maryland, Rhode Island, Delaware, Texas, Alabama, Georgia and Colorado, the agricultural program length in grades 7th and 8th varied from six weeks to one year (Herren and Denham, 1990).

Enrollment Trends

Enrollment in vocational agriculture programs peaked in the late 1970s and are now declining about 1 to 3 percent annually. (National Research Council, 1988). In 1976-77 there were 697,499 secondary students enrolled in

agricultural education, however, in 1987-88 there were 522,373 students enrolled (Agriculture's Leading Edge FFA, 1987-88). It is anticipated that if middle schools offered exploratory agricultural education programs, those students enrolled would remain in the secondary school program.

For example, Luft (1990) pointed out that agricultural education programs at the junior high level may spark an interest in some students that had not previously given any thought to studying or pursuing a career in agriculture. This is due partly because this type of instruction generally focuses on subjects about agriculture. In that case, it serves as a means of recruiting students for the secondary program.

Herren and Denham (1990) believed that a properly conducted middle school program can be an asset to the secondary program in the area of recruitment. In addition, Hedrich (1985) believed that the first step to exposing more students to the agricultural education area is to teach an exploratory course for 7th and 8th grade students before they reach their freshman year.

On the other hand, Doese and Miller (1988) conducted research, "Factors Affecting the Future Enrollment of Students in Vocational Agriculture", that came to another conclusion. One conclusion of this study is that vocational agriculture enrollments will be suffering in the 1988-89 school year as well as later. The majority of the 8th grade students are not planning on enrolling in vocational agriculture their freshman year. However, some students that were surveyed plan on enrolling in vocational agriculture sometime during their high school career, but not their freshman year.

Benefits of the Middle School Program

The main benefit of the middle school program is in the area of recruitment. Some people, such as Luft, (1990) and Herren & Denham (1990) believed that middle school programs can serve as a means of recruiting students for the secondary agricultural education programs.

However, other authors such as Birkenholz (1990) said that agriculture teachers should avoid the temptation of using pre-secondary agriculture classes to recruit students into the secondary agriculture program. Granted, some students may enroll in the secondary program as a result of the experiences received in pre-secondary class, however, student recruitment should not be the overriding objective. According to Birkenholz, serving the needs of students is an appropriate basis upon which to deliver pre-secondary agricultural instruction; recruitment of students is not.

On the other hand, Doese and Miller said that 8th grade students, who responded to the survey, "Factors Affecting the Future Enrollment of Students in Vocational Agriculture", felt that the exploratory programs would be helpful in increasing enrollments and also FFA membership in the long run. It was estimated that 75 percent of the vocational agriculture students are FFA members (National Research Council, 1988). If enrollment in agricultural education programs increases, the FFA membership also should increase.

According to Deeds, McGrew & James (1990), throughout the history of agricultural education, FFA has been touted as the best recruitment tool available for encouraging students into the program. They pointed out that the Junior FFA can provide that same function in the pre-secondary program while also providing students with personal growth and success experiences.

In addition, Deeds et. al. point out that students who are interested in agriculture, have the desire to achieve, and the parental support, will continue in an agricultural education program. They cited Lee James, agriculture education instructor and FFA advisor in Weir, Mississippi, who said, "Those who suggest a burnout problem are selling the FFA organization short".

In addition to the recruitment and membership benefits, agricultural education at the middle school can help to broaden the number of individuals in our society that may be more agriculturally literate (Luft, 1990). Moreover, Herren and Denham (1990) said, "Not only is the agricultural literacy level of the students increased, but also the agricultural awareness of the community is expanded".

Hedrich (1985) said, "An exciting aspect of the seventh and eighth grade program is that students can start their SOEP and use this year to start establishing their program, instead of using their freshman year to establish their SOEP. It gives them an additional year with their SOEP, plus they are recognized on the national level for FFA membership".

Factors Affecting Enrollment

There are no studies known that deal with the factors that affect enrollment in the agricultural education programs at the middle school level. However, some studies at the secondary level point out several reasons why students enroll or not enroll in the agricultural education programs. For example Smick and Seibel (1984) found that the causes of non-enrollment in vocational agriculture by high school FFA members are the following: students often need courses required for graduation which conflict with vocational

agriculture courses, vocational agriculture routinely conflicts with college preparation courses, and students leave vocational agriculture because they develop new or other interests outside of agriculture.

Elliot (1988) found that the reasons why Ohio students selected vocational courses are the following: job preparation, enjoyment of vocational subject matter and the environment in which the vocational education courses were taught, personal reasons, monetary benefits, perceived ease of grades, attraction of affiliated youth organizations, preparation for education beyond the secondary level, positive prior experiences with vocational teachers, and contacts with individual in vocational trades. In addition, Elliot found that parents, friends, and other relatives encouraged and/or supported Ohio students to choose vocational education courses.

Rossetti, Elliot, Price, and McClay (1989) studied the factors that influence students not to enter into a high school vocational curriculum. They summarized 16 reasons why students do not enroll in vocational education. The reasons in rank order are the following: plan to go to college, never thought of it, do not want to become a member of a vocational youth organization, the image of the quality of vocational education, would limit career choice, scheduling problems, comments from other students, image of quality of vocational teachers, low ability of vocational students, comments from other teachers, associating with vocational students, graduation requirements, vocational students are problem students, vocational courses were never presented as an option, cost prohibitive, and courses are too difficult.

Characteristics of Middle School Programs

Duration

Agriculture courses at the middle school vary in length from six weeks to a full year. For example, in Georgia the length of courses are six to eight weeks. (Herren and Denham, 1990). The 7th and 8th program at the Chilton High School in Wisconsin runs for 18 weeks. (Hedrich, 1985). Cheek et al. (1985) found that in Florida, Wyoming, Nevada, New Mexico, Maryland, Rhode Island, Delaware, Texas, Alabama, Georgia and Colorado, the agricultural program length in grades 7th and 8th varied from six weeks to one year.

Topics Covered

At the middle school level the courses generally offered are exploratory and orientation courses. Exploratory courses are designed to provide an overview of career opportunities in the broad areas of agriculture. Specific careers are investigated with respect to the nature of work in each occupation. Job requirements as well as training requirements, employment opportunities, compensation, and other relevant information are also topics taught in these programs. On the other hand, orientation courses are designated to provide a broad experience in developing knowledge and skill in many areas of agriculture. Orientation courses in agriculture serve as the basis for selecting more specialized areas of agriculture for further work and study at the upper grade levels (Phipps and Osborne, 1988).

According to Herren & Denham (1990), in Georgia, middle school programs are designed as an introduction rather than an in-depth study of the agricultural discipline. Specifically, Herren & Denham used as an example the exploratory agriculture program at Putnam County Middle School at Eatonton,

Georgia. The objective of the program is to introduce students to the "world" of agriculture. The same basic principles used in teaching high school agriculture are used. As in any good agricultural education program, the basics are first learned in the classroom and then carried through to application in a laboratory setting. Principles of plant growth, animal production and soil science are touched upon during the six weeks the students are in the course.

Hedrich (1985) said that instructors should teach an exploratory course for 7th and 8th grade as a way to expose more students to the agricultural education course. According to Hedrich, the type of course offered at this level should be a general vocational agriculture course. It should by no means be a watered down course from the rest of your offerings. It should allow the students to explore the many facets of agricultural production, as well as agribusiness, and give them a true picture of today's agriculture.

Birkenholz (1990) said that

"junior high or middle school students should be exposed to the broad scope of the agricultural industry with lessons focusing on each sector including production, supplies services, and marketing. Instructional units should also focus on the role of government in agriculture ranging from production controls to restaurants inspections. Individual lessons and projects should be designed to provide students with practical experiences which illustrate how the industry of agriculture directly affects everyone. Lessons on careers in agriculture should also be incorporated to enable students to explore the range of opportunities available in the industry. The curriculum should provide activities which illustrate the practical applications on science and mathematic principles. Laboratory exercises which illustrate seeding germination, photosynthesis, transpiration, and asexual reproduction in plant sciences and nutrition, genetics, and environmental management in the animal sciences should be included".

Kuempel and Spivey (1990) proposed that middle schools should provide exploratory courses in agricultural education utilizing horticultural science. The major emphasis of the agriscience program is to provide middle school students with an introduction to agriculture as it relates to horticulture, and to relate horticulture to academic classes such as science, math and technology. The basic use of the lab is for agriculture courses which emphasize plant and soil science. Projects can vary from landscaping to gardening and ornamental plants.

Waidelich (1990) said, "for agricultural education programs to be productive in the middle school, curriculum designers and instructors need to understand a new educational concept that incorporates agricultural literacy programs, courses for a semester or less, interdisciplinary approaches, and personal development". According to Waidelich, course content must not be production agriculture oriented. Rather, activities such as vegetable and house plant propagation, care and identification; companion animal care; and agribusiness care r shadowing must be emphasized.

Voluntary vs. Mandatory Enrollment

Another issue in which there are different points of view among states is whether the program of agricultural education at the middle school level should be voluntary or mandatory. In some states, the courses of agriculture at the middle school level are mandatory, while in others they are voluntary. For example, in Georgia the middle school programs are usually mandatory (Herren and Denham, 1990). Moreover, Luft (1990) said that, "the classes offered for junior high students were usually required of all students at the selected grade level". On the other hand, Weeks (1990) pointed out that

agriculture should be infused into existing curriculum by teaching units or in elective mini-courses that meet for less than a semester.

Facilities

The facilities appropriate and necessary for a particular program of agricultural education depend upon the purposes of the program. For this reason establishing clear program objectives is a prerequisite for adequate facility planning. As program objectives change, facilities may need to be improved or modified (Phipps & Osborne, 1988).

The term facilities includes not only the building and its equipment and furnishings, but also its dimensions, types of surfaces (color of walls, types of floor, window coverings), amount of lighting, noise control and acoustical materials, air conditioning and ventilation. Human beings are greatly influenced by their environment whether it is the classroom, the athletic field, or an office. Such physical factors such as lighting, acoustics, and use of color have psychological implications and so should be planned carefully to provide an atmosphere that is conducive to learning (Calhoun & Finch, 1982).

Instruction cannot be provided effectively with insufficient facilities. Adequate facilities are a prerequisite to quality instruction. The nature of facilities has a tremendous effect upon program image. However, the middle school programs often have limited facilities.

Instructional Characteristics

Luft (1990) pointed out several instructional characteristics that he felt should be considered in the delivery of junior high agricultural classes. The characteristics are the following: 1) Classes and instruction should be dynamic. 2) Instruction should be unique. 3) Instruction at junior high level should be activity centered, and 4) Instruction should incorporate new technologies. Teachers must generate interest in the agricultural subject matter through their own enthusiasm. If classes are boring and lack dynamics, students will not want to enroll at the high school level. If the classes offered consist only of the traditional basic production agriculture and agriculture mechanics, that is what students will think the high school program entails. Good activities used to teach scientific agricultural concepts and skills will expose students to the type of instruction (hands-on) they will receive in a good high school program. Exposure to technology in agriculture demonstrates to the students the changes that are occurring.

Program Names for Middle Schools

Agricultural educators use several terms to talk about the agricultural education program in 7th and 8th grade. The terms more frequently used are: pre-secondary agricultural education, junior high agriculture, agricultural education at middle school, and agricultural education at intermediate levels.

Grades Levels for Middle Schools

Grade levels included in middle schools and junior high schools are not well defined. For example, the term middle school is currently used to talk about grades 6 through 8, but also grades 5 through 8, 5 through 7, and 6

through 7. On the other hand, junior high schools mainly includes grades 7 through 9, but also grades 6 through 9 and 5 through 9.

Middle schools serve students in several grades. Becker (1990) said, "Schools serving the middle grades encompass a wide range of grade spans, from those that serve only students in grades 7 and 8 to those that serve students from kindergarten to grade 12." Becker grouped schools serving middle grades into three categories: those that also serve younger students (e.g. k-8, k-12, 4-8); those whose lowest grade level is 5 or 6 grade (e.g., 5-8, 6-8); and those in which seventh is the lowest grade level (e.g., 7-8, 7-9. and 7-12). However, Epstein (1990) found that schools in the United States that enroll seventh grade students include about 30 different grade spans. Epstein grouped these variations into six categories. The categories are the following: 1) Elementary/Middle, 2) Elementary/Middle/High, 3) Middle, 4) 7th - 8th grade, 5) Junior High, and 6) Middle High.

Funding of Programs

Florida, Wyoming, Nevada, New Mexico, Maryland, Rhode Island, Delaware, Texas, Alabama, Georgia and Colorado have formalized, funded, agricultural pre-vocational programs in grades 7 and 8. The pre-vocational courses were classified as vocational courses in six states (Cheek, et al, 1985).

Hedrich (1990) said that the type of course offered at the middle school level should be a general vocational agricultural course. If courses are classified as vocational, the states can receive funds through the federal vocational educational acts.

Curriculum Materials

Herren and Denham (1990) said that because middle school agriculture programs are relatively new, texts and teaching materials are limited, so the teachers must adapt more material to their situation.

Cheek, et al.(1985) indicated that four states: Florida, Georgia, Alabama, and Colorado have developed instructional materials to support programs at the middle school level.

PROCEDURES

The following section describes the procedures used to conduct this research study. The method used to select the states and individual programs described in this study will be discussed. In addition, the procedures involved in designing and analyzing the instrument will be described.

Research Design

This project was developed as a descriptive survey research design. Three instruments were designed for the study and are included in appendix A. The executive secretary questionnaire was designed to describe the national baseline enrollment figures for students in agricultural education programs in the middle and junior high schools. The questionnaire also gathered data on the years when programs started in the 6th, 7th and 8th grades. State data was also collected to determine the number of schools with FFA program and the number of students enrolled in grades 6, 7 and 8. It also sought to determine the nature of the curriculum in each state. Questions regarding student competitions were also included. The instrument also sought to describe the organization and funding structure for FFA programs in the middle and junior

high schools. Executive secretaries were also surveyed to discuss the major encouragers and barriers to enrollment. In addition, they commented on the major benefits and disadvantages of the states' middle or junior high school agricultural education programs. The survey also asked their opinions of whether or not middle or junior high school membership in the FFA helped to increase membership in the high school FFA.

The second questionnaire was designed for the teachers of successful programs. Teachers reported enrollment data for their programs and described their program in terms of the curriculum, program length, organization, dues structure, year of program initiation and competitions held. The teachers also gave their suggestions regarding potential national FFA competitions or events for middle or junior high school students. They described the major encouragers and barriers to student enrollment. They also commented on the major student and school benefits and disadvantages to enrollment. The data describes the critical components of a successful middle or junior high school agricultural education program and FFA chapter. Teachers also commented on whether they felt middle or junior high school programs helped increase membership in the high school FFA.

The student questionnaire gathered information on their grade level, gender, race and place of residence. Students also indicated if they planned to enroll in a high school agriculture class and if they planned to be a member of the FFA. Students were asked to indicate who influenced them when making a decision to enroll in an agricultural education class. It was also determined if the class was required or elective. Students also identified the reasons they enrolled in their agriculture class. Opinions were solicited from the students to discover what they liked best and what they liked least

about their agriculture class, about their teacher and about being a member of the FFA.

Subject Selection

There were three separate questionnaires used in this study, each targeted toward a specific population. The population for the executive secretary questionnaire was the 53 executive secretaries including one from each state, Washington D.C., Puerto Rico and the Virgin Islands.

The teacher population consisted of 27 selected middle or junior high schools in 9 selected states including: Alabama, Florida, Georgia, Louisiana, Mississippi, New York, Oklahoma, Virginia and Wisconsin. Twenty-three teachers responded to the teacher questionnaire. Those 23 schools that participated in the study are listed in Table 1.

Table 1

Schools in the Study

<u>State</u>	<u>School</u>
Alabama	Abbeville Middle School Cherokee Middle School Riverside Junior High School
Florida	Deland Middle School Lake City Middle School Beasley Middle School
Georgia	Tift County Junior High School Morgan County Middle School
Louisiana	Lee Road Junior High School Mansura Middle School Iota Junior High School
Mississippi	East Marion High School New Hebron - Topeka-Tilton
New York	Madison Central School Tri-Valley Central School
Oklahoma	Elgin Holdenville High School Billings
Virginia	E.W. Wyatt Middle School Sugar Grove
Wisconsin	Montello High School New Auburn High School Green Bay Edison Middle School

The student population consisted of approximately 30 students in each of the 27 programs selected. The teachers were asked to distribute the questionnaires to intact, representative students in their middle or junior high school agriculture classes. Each teacher was asked to collect data from

at least 30 students. The actual number of students completing the questionnaire was 598 students. Data were collected Spring 1991. All responses were coded and entered into the computer from the completed questionnaires. Unanswered items were coded as missing data.

Instrument Development

The executive secretary questionnaire was developed by the research team of Drs. McCaslin and Rossetti, with the assistance of Marshall Stewart, selected executive FFA secretaries and selected teacher educators including: Dr. Larry Arrington (FL), Dr. Barbara Kirby (NC), Dr. Stacy Gartin (WV), Dr. John Hillison, (VA), Dr. Jerry Peters (IN) Dr. Larry Miller (OH). Questions were composed and field tested by James Scott, executive FFA secretary for Ohio. The questionnaires were mailed to the 53 FFA executive secretaries with a self-addressed stamped envelope. Completed questionnaires were returned to The Ohio State University for processing.

The teacher questionnaire was developed by the research team of Drs. McCaslin and Rossetti, with the assistance of Marshall Stewart, selected FFA secretaries, Matthew Hughes, and the above mentioned list of selected teacher educators. The instrument was field tested by William Bush and Thomas Durbin, 8th grade instructors from Ohio.

The student questionnaire was developed by the research team of Drs. McCaslin and Rossetti, with the assistance of Marshall Stewart, selected FFA secretaries, Matthew Hughes, and the above mentioned list of selected teacher educators. The instrument was field tested for content clarity and readability on 8th grade agricultural education students at Ohio's Oak Hill High School and Georgetown High School. Data was initially collected for the

pilot test to determine the reliability coefficient of stability. Research assistant, Robert Torres, collected the data at both of these Ohio schools. Students and teachers were encouraged to ask questions if they did not understand a question. After completion of the field test, items that caused the students or teachers difficulty were re-worded or eliminated. Two weeks after the field test, the revised teacher and student instruments were mailed to the 27 selected schools with a self-addressed, stamped envelope in order to complete the pilot test. The teachers administered the students' questionnaires and all were completed and returned to The Ohio State University for processing.

Content validity on the three questionnaires was established by the panel of teacher educators mentioned previously and Matthew Hughes, a graduate student who was a former middle school agricultural education instructor.

Reliability was determined on the three questionnaires using test-retest procedures. There was a two week interval between the test and retest for the teacher and students' questionnaires. The reliability coefficient of stability was .89 for the student questionnaires from Oak Hill High School and .78 from Georgetown High School.

Data Analysis

All completed questionnaires were coded and the data were entered into a personal computer by David Padilla, research assistant. The Statistical Package for the Social Sciences (SPSS/PC+) was used to analyze the data.

Descriptive statistics were employed in order to describe the sample. Frequencies and measures of central tendency were computed. For the open-

ended responses, data were analyzed by summarizing the responses into categories. Frequencies and percentages were computed for each category.

STATE FFA EXECUTIVE SECRETARIES QUESTIONNAIRE RESULTS

Description of the Sample

There were 53 state FFA executive secretaries surveyed from the 50 states and from Washington D. C., Puerto Rico and Virgin Islands. Fifty-two questionnaires were returned. Puerto Rico was the only state who did not return the questionnaire.

Enrollment in Agricultural Education and Membership in the FFA

A total of 30 states reported having middle or junior high school agricultural education programs. Additionally, 19 states reported having FFA members at that level. Table 2 shows the total enrollment and membership in the 6th, 7th and 8th grade in the 52 states that returned the questionnaires. It also shows the average length of the programs and the total membership in the FFA.

Table 2

Enrollment in Programs					
Grade Level	Schools w/ Ag. Ed.	Students w/ Ag. Ed.	Ave. Program Length	Schools w/ FFA	Students w/ FFA
6th	21	924	9 wks.	15	124
7th	514	22,056	20 wks.	378	4,730
8th	1,012	29,988	21 wks.	853	12,868
Total	1,547	52,968	17 wks.	1,246	17,722

For the 52 states responding to the questionnaire, there was an average of 44 students in the 6th grade programs, 43 students in the 7th grade programs and 30 students in the 8th grade programs. Three states reported enrollment in 6th grade (New York, Virginia, and Wisconsin), 19 states reported enrollment in 7th grade, and 24 states reported enrollment in 8th grade. Regarding membership in the FFA, there was an average of 8 students in the 6th grade programs, 13 students in the 7th grade programs and 15 students in the 8th grade programs. Of the total 52,968 students in the three grade levels, 17,722 (33%) were enrolled in the FFA.

The average length of the 6th grade program was 9 weeks. The length of a 7th grade program varied from 8-36 weeks long, with an average length of 20 weeks. The average length of the 8th grade program was 21 weeks, with a range of 6-36 weeks.

Years Programs Began

State FFA executive secretaries were asked to indicate the year when students in their states first enrolled in agricultural education at the 6th, 7th and 8th grade levels. The earliest reported 6th grade program was started in by Mississippi in 1974, the latest was in 1991. Seventh grade programs were begun as early as 1930 in Vermont and as late as 1990. Eighth grade programs were first reported by Virginia in 1926, while one state reported starting in 1990.

Years FFA Membership Began

State FFA executive secretaries were also asked to indicate the year that they first began accepting membership in the FFA at the 6th, 7th and 8th grade level. Sixth graders were first admitted to membership as early as 1974 in Mississippi and as late as 1989. Seventh graders were first accepted for membership as early as 1960 in Louisiana and as late as 1990. Eighth graders were first accepted for membership in 1926 by Virginia, and as late as 1990. In addition, State FFA executive secretaries were specifically asked to indicate the year in which their state first allowed for membership in the FFA at the middle or junior high school level. One state began enrolling FFA members in programs in 1926, while four started in 1990.

Core Curriculum

State FFA executive secretaries were surveyed to determine if they had a core curriculum for the middle and junior high school agricultural education programs. Fourteen state FFA executive secretaries (27%) said yes, 18 (35%) said no, while 20 (38%) did not answer the question. Twenty-three topics were listed on the survey and the executive secretaries were asked to indicate which topics were included in their core curriculum. Table 3 shows the topics in rank order with frequencies indicated.

Table 3

Topics in Core Curriculum	
<u>Topics</u>	<u>f</u>
Plant Science	9
Career Exploration	8
Agricultural Literacy	7
Animal Science	7
Conservation	7
Mathematics	7
Agricultural Mechanics	6
Soil Science	6
Public Speaking	6
Human Relations	6
Ecology	6
Leadership	6
Writing	6
Social Skills	6
Supervised Agricultural Experience	5
Employability Skills	4
FFA Meeting Procedures	4
Parliamentary Procedures	4
Using Microcomputers	4
Agricultural Marketing	4
History of FFA	3
Role of FFA	3
International Agriculture	3

Five states (Wisconsin, Virginia, Florida, Alabama and Missouri) sent in state curriculums for the middle school grades. Seven schools sent in course outlines. These curriculum guides and outlines are on file at The Ohio State University.

Competition in the Middle or Junior High Schools

Seventeen (37%) state FFA executive secretaries reported that they provided state level competition for middle or junior high school FFA members. Fifteen (29%) state FFA executive secretaries indicated they do not provide state level competition and 20 did not respond. For those executive secretaries that indicated they provided state level competition, they were asked how that competition was held.

Fourteen state FFA executive secretaries indicated that competition was held in conjunction with high school FFA events. Six state FFA executive secretaries said the competition was separate from high school FFA events. Four state FFA executive secretaries said that competition was held at the 6th grade level, while 14 state FFA executive secretaries said the competition was at the 7th grade level and 17 state FFA executive secretaries said the competition was at the 8th grade level.

Seventeen state FFA executive secretaries listed the specific state level competitions held for middle or junior high school students. Table 4 provides a list of the events in rank order.

Table 4

 State Competitions

Creed	<u>f</u>
Livestock Judging	5
Public Speaking	3
Crops	3
All Contests	3
Livestock Showing	2
Meats	2
Horse Judging	2
Agricultural Mechanics	2
Agricultural Science Fair	2
Dairy Foods	2
Speech	1
Proficiency Awards	1
Parliamentary Procedures	1
Farm Management	1
Agricultural Sales	1
Job Interview	1
Quiz Bowl Contest	1
Essay Contest	1
Poultry	1
Ornamental Horticulture	1
Agriscience Student Recognition	1
Computers in Agriculture	1
Tractor Driving	1
Electrification Essay	1
Seed	1
Tree Identification	1

Suggested National FFA Competitions

The state FFA executive secretaries were asked to suggest national FFA competitions/events for middle or junior high school students. They could write in their suggestions as a open-ended response on the questionnaire. Twenty-five executive secretaries provided their suggestions.

Fourteen state FFA executive secretaries felt that there should not be national competition for middle or junior high school students. Two executive secretaries said "do not have separate competitive events at national level. If a state wants to promote Junior Divisions of contests for 7th and 8th grade- leave it up to the state." Three executive secretaries pointed out that national competition for middle or junior high school students is not appropriate. Another executive secretary wrote, "I do not think students of this age should be mixed with older students for overnight activities." One executive secretary said that he does not favor a dual system or separate operation. One executive secretary felt that "it will be a mistake to implement any competition above the chapter level." Also, one executive secretary thinks FFA events should be restricted to districts within the states.

On the other hand, there were seven state FFA executive secretaries who encouraged national competition. One executive secretary felt that some type of awards and/or competition be established for middle or junior high school students. Another executive secretary wrote, "I would welcome national competitions to establish a stronger presence in middle schools." One executive secretary said "It would be nice to offer a limited number as an incentive for younger members." However, one executive secretary pointed out

that the emphasis should be exploratory and "standards oriented", but not competitive.

The contests recommended by four executive secretaries to included on a national level include: quiz bowl, essay contests, creed speaking, and tool and material identification. One executive secretary commented that national FFA competitions have some good possibilities, however he felt they needed to be limited because students could burn-out in the FFA before reaching high school.

Organization of FFA Chapters

Twelve of the states indicated that the middle or junior high school FFA chapter was organized separately from the high school. Twenty-four states said the chapter was a joint chapter with the high school FFA. One executive secretary said that he has junior chapters which work with high school chapters on some projects and receive assistance from high school FFA officers. Another executive secretary pointed out that he has mini chapters. Fourteen executive secretaries did not respond to this question.

FFA Dues

State FFA executive secretaries were asked if they require FFA dues for middle or junior high school members. Twenty-seven of the 52 executive secretaries said yes, 5 said no, and 20 did not answer this question. The amount of money that FFA members paid from \$.50 to \$8.00. The average dues for middle or junior high school members was \$3.98.

Type of Funding Used

State FFA executive secretaries were asked to indicate the type of funding that they used to finance middle or junior high school programs of agricultural education. Seven executive secretaries indicated that they used federal funds to finance agricultural education, 14 said that they used state funds, and 31 indicated that they used local funds.

In another question related to funding, state FFA executive secretaries were asked about the sources of funds that they used to finance middle and junior high school programs of agricultural education. Twelve executive secretaries indicated that they used agricultural education funds to finance middle and junior high school programs, 10 executive secretaries said that they used secondary education funds, and four indicated that they used foundation funds. One executive secretary said that he used taxes, another one said that he used legislative grants, while another executive secretary said that this varies from system to system.

Major Encouragers of Enrollment

On an open-ended question, executive secretaries were asked to write in the major encouragers of middle or junior high school enrollment in their state agricultural education programs. Six executive secretaries said that the major encouragers of middle or junior high school enrollment in their state are the agriculture instructors. Some executive secretaries pointed to the FFA activities as the major encourager. District and state competitions, and livestock exhibits in junior shows were cited as example FFA activities.

Four executive secretaries indicated that the program itself is the major encourager, while another cited "hands on" experiences. Other executive

secretaries stated that different groups of people are the major encouragers. Some groups of people listed by executives secretaries included: school and agricultural education program administrators, counselors, parents, brothers and sisters, FFA advisors, current and former students, and selected teachers.

On the other hand, other executive secretaries reported that the major encouragers are the following: special interest in agriculture; use of agricultural education to teach career development, technology and science skills; agricultural literacy; availability of curriculum materials for use by teachers; required courses; and the short length of the program.

Major Barriers to Student Enrollment

Taking another perspective, state FFA executive secretaries reported on an open-ended question, what they felt were the major barriers to student enrollment in their state middle or junior high school agricultural education programs. Twenty executive secretaries cited the school system and policies as a barrier to enrollment. Examples include: no state/federal funds, lack of staff to expand programs into junior high, lack of available programs, a significant shortage of certified agricultural education teachers, and schools that do not want to expand their agricultural education staff to accommodate middle school programs.

Nine executive secretaries mentioned scheduling as a major barrier. Others indicated that administrators', counselors' and parents' perceptions about agriculture are barriers.

One executive secretary indicated that "younger students sometimes are not as interested as high school students". Another felt that the lack of opportunities is a barrier, while another said that it is because, "poor

programs do not attract students." On the other hand, one executive secretary felt that marketing effectiveness is a barrier, while another one said that the state board is the major barrier.

Major Students Benefits/Outcomes

In order to access the state FFA executive secretaries' opinions of the major benefits/outcomes of their state middle or junior high agricultural education program, the executive secretaries responded to an open-ended question. Twelve executive secretaries indicated that the major student benefit was improved agricultural literacy.

Seven executive secretaries indicated that middle or junior high school agricultural education programs increased enrollment in secondary schools. Other executive secretaries cited the following benefits: "increased student accomplishments at earlier age"; "increased student retention in later years"; "increased attention and positive attitudes"; "has helped maintain membership at over 4,000 state members in spite of large decline in high school population"; "students are into agricultural education before high school".

Executive secretaries indicated that participation in FFA activities is another benefit. Four executive secretaries cited involvement in the FFA as a benefit. In addition, an executive secretary said "students have an opportunity to begin supervised agricultural experience programs earlier". Others indicated leadership development training was a benefit.

Six executive secretaries felt that career awareness was a benefit. Another executive secretary said that students benefitted from an enhanced exposure to agriculture. Other benefits mentioned included: an assortment of

semester courses; a reduced drop-out rate; builds self esteem; and knowledge and skill development in agriculture.

Major Student Disadvantages

The state FFA executive secretaries were also asked what they felt were the disadvantages to students who enroll in their state middle or junior high school agricultural education programs. The most popular response given by seven state FFA executive secretaries was that there were no disadvantages.

However, other executives secretaries felt that there are some disadvantages to students who enrolled in middle or junior high school agricultural education programs. For example, five executive secretaries indicated burn out of students as a disadvantage. One executive secretary cited lack of interest, while another one said, "a lack of good curriculum".

Other executive secretaries pointed to other disadvantages. "Looks like a home economic program", claimed an executive secretary. Another executive secretary said, "if the program is too long, the student may not have an opportunity to explore a variety of careers". One executive secretary indicated that school policies would not allow junior/senior high school students to compete in the same activities. Another secretary said, "teachers are not prepared for junior high instruction."

Other disadvantages were the following: duplication of course work in high school; most students enrolled in the program longer than 12 weeks are unable to explore the other vocational areas; students will not have an opportunity to complete the state department's required courses; the maturity level of students makes it difficult to do activities with older students;

resistance from some administrators; competition with other courses; and repetition of course material in some instances.

Major State Benefits/Outcomes

In an open-ended question state FFA executive secretaries were asked to indicate the major state benefits/outcomes of their middle or junior high school agricultural education programs. Increased enrollment was a popular benefit, as indicated by eight executive secretaries, followed by a better educated population, as cited by five executive secretaries. One executive secretary saw that there were, "more students and teachers involved with the agricultural education program", while another pointed out that "the student that has a middle school education is better equipped to go into the high school agriculture program". On the other hand, some executives secretaries reported that increased FFA membership is another benefit, while others indicated it increased retention of students, increased students' accomplishment at earlier levels, and increased participation in state contests.

Some executive secretaries stated that students have a great opportunity to explore agriculture and natural resources careers. For example, an executive secretary said "greater opportunities to explore career and learn about career opportunities in science, business, and technology." Another executive secretary said, "introduce students to agriculture and its importance, agriculture careers, and leadership".

Other executive secretaries cited the following benefits: high program justification; those really good students get a start in the program; recruitment; application of academic skills; awareness of agriculture;

expanded student base; junior high agriculture programs help to channel interested motivated students into high school programs; provide opportunities in youth leadership activities.

Disadvantages to States

State FFA executive secretaries also were asked what were the disadvantages to states who enroll middle or junior high school students in agricultural education programs. The most popular response given by eleven state FFA executive secretaries was that there were no disadvantages. However, two executive secretaries indicated there was a possible FFA/agricultural education burn out, another one said "some programs have become junior high school programs only and have not retained students in higher levels". Also, one executive secretary pointed out that it, "will reduce participation in upper grades." Other disadvantages reported include: increased number of students for teachers; limited participation; difficult to establish continuity; and a large expenditure of money for a non-vocational program.

Increase in High School Membership

State FFA executive secretaries were asked to indicate their opinion whether or not middle or junior high school membership in the FFA helped to increase membership in the high school FFA. Twenty-five executive secretaries said yes, while three said no, and 24 did not respond. In addition, executive secretaries were asked to write an explanation of their opinion.

Some executives secretaries felt that middle or junior high school membership in the FFA helps retention in the long run. An executive secretary

said, "students continue in agricultural education and then join FFA." Other executive secretaries felt that the program in middle or junior high school increased membership in agricultural education and FFA. One executive secretary said "students will understand agricultural education and FFA and thus enroll in the high school program". Another pointed out "exposure to agricultural education/FFA with increase membership". Another executive secretary commented that in some cases it encourages students who might not have otherwise become members. Another indicated that those students really active in junior high school usually are active FFA members in high school. One executive secretary said

"the middle or junior high school FFA members are exposed to the Chapter Advisor and high school members who can demonstrate and explain the benefits of FFA membership. The junior high membership opens a multitude of opportunities for member participation in leadership skill development which promotes continued membership in high school."

Another executive secretary indicated that if interest and understanding of the opportunities can be stimulated in the 6th, 7th, and 8th grade, more students will enroll in agricultural education at the high school level.

Some executive secretaries felt that the middle or junior high school program allowed students more orientation to programs before high school. One executive secretary indicated that more knowledge of FFA coming into high school means more familiarity with career possibilities, while another one said, "students are able to make more informed decisions about whether to enroll in high school agricultural education programs." Another executive secretary cited the fact that the program in middle schools increased exposure to opportunities available in the FFA.

One executive secretary reported that middle or junior high school membership in the FFA served as a recruiting tool. According to this

executive secretary the key is always the instructor. If there is a good instructor, the students will stay, if not they may leave the program earlier than before. However, another executive secretary believes that "it is very much dependant on the quality of the program at both the local junior high and the local high school." Other comments included: it allows teachers to become better acquainted with their student; it helps to build their self esteem and leadership opportunities for success; regardless of middle or junior high school membership, the high school teacher is still the key to high school membership; it gets students involved early before high school pressures hit them; and in some cases students get burned out.

TEACHER QUESTIONNAIRE RESULTS

Description of the Sample

There were 27 teachers surveyed from the nine selected states (Virginia, Wisconsin, Florida, Oklahoma, Georgia, New York, Mississippi, Louisiana and Alabama. Three teachers from each of the nine states were nominated by the state executive secretary. Twenty-three (85%) completed questionnaires were returned.

Enrollment in Agricultural Education and Membership in the FFA

Table 5 shows the total enrollment and membership in the 6th, 7th and 8th grade in the 23 selected middle schools. It also shows the average length of the programs and the total membership in the FFA.

Table 5

Enrollment in Programs			
Grade	No. of Students	Length of Program Ave.	FFA Enrollment
6th	572	15 wks.	51
7th	1,577	20 wks.	494
8th	823	27 wks.	414
Total	2,972	21 wks	959

For the 23 teachers responding to the questionnaire, there was an average of 114 students in the 6th grade program, 83 students in the 7th grade program and 43 students in the 8th grade program. Regarding membership in the FFA, there was an average of 51 students in the 6th grade, 29 students in the 7th

grade and 21 students in the 8th grade. Of the total 2,972 students in the three grade levels, 959 or 32% were enrolled in the FFA.

The 6th grade program varied from 4-36 weeks in length with an average length of 15 weeks. The average length of a 7th grade program was 20 weeks long, with a range of 6-36 weeks. The average length of the 8th grade program was 27 weeks, with a range of 9-36 weeks.

Organization of FFA Chapter

Fourteen of the schools indicated that the middle or junior high school FFA chapter was organized separately from the high school. Seven schools said the chapter was a joint chapter with the high school FFA. Two schools indicated that they did not have a middle or junior high school FFA chapter. Two schools had separate chapters for each middle or junior high school grade. There were other organizational structures indicated on the questionnaire. For example, one school reported that their 6th grade chapter was separate from the 7th and 8th grade chapter, which is also separate from the high school. One school indicated that they have one individual chapter in their school. Another school said that those students that want to can pay state or national dues, if not, they are considered associate FFA members.

FFA Dues

Teachers were asked if they require FFA dues for 6th, 7th and 8th grade students. Eighteen of the twenty-three teachers said yes, while five said no. Nine teachers indicated that students are charged local dues. The amount charged for local dues ranged from fifty cents to seven dollars. The average charged for local dues was \$2.56.

Twelve teachers indicated that students are charged state dues. The amount charged for state dues ranged from \$1.00-\$7.00. The average charged for state dues was \$4.04.

One teacher indicated that students are charged \$3.50 for national dues. Another teacher indicated that "other" dues of \$1.00 were charged to students, while another teacher charged \$3.00. The range of total dues charged to FFA members was from \$2.50-\$10.00, with an average of \$6.40.

Years Programs Began

Teachers were asked to indicate the year that students first enrolled in agricultural education in the 6th, 7th and 8th grades. Morgan County Middle School in Madison Georgia, reported the earliest formation of the 6th, 7th and 8th grade programs, tracing the beginning of the 6th grade program to 1986. The 7th grade program started in 1973, while the 8th grade program was started in 1969.

Five programs reported beginning their 6th grade programs between 1986 and 1990. Seventh grade programs were begun as early as 1973 and as late as 1990, with the majority starting in the early 1980's. Eighth grade programs first began in 1969, while one was just started in 1990. The majority of the 8th grade programs were started in the mid 1980's.

Years FFA Membership Began

The data was almost identical to the years when programs started, when comparing the years in which students were first enrolled in agricultural education and the years students became members of the FFA. Sixth graders were first admitted membership as early as 1986 and as late as 1990. Seventh

graders were first accepted for membership in 1973, and as late as 1990. Eighth graders were first accepted for membership in 1969, and as late as 1990.

Core Curriculum

Teachers were surveyed to determine if they had a core curriculum for the middle and junior high school agricultural education programs. Twenty-one teachers (91%) said yes, while two teachers (9%) said no. Twenty-three topics were listed on the survey, and the teachers could indicate which were included in their course curriculum. Seven teachers attached a copy of the course outline to further describe their curriculum. Table 6 shows the topics in rank order and their respective frequency.

Table 6

Topics in Core Curriculum	
Topics	f
Animal Science	16
History of FFA	16
Leadership	15
Plant Science	15
Parliamentary Procedures	14
Role of FFA	14
Career Exploration	14
Agricultural Mechanics	13
FFA Meeting Procedures	13
Supervised Agricultural Experience	13
Public Speaking	12
Soil Science	12
Employability Skills	11
Conservation	11
Using Microcomputers	9
Human Relations	8
Writing	8
Mathematics	8
Agricultural Literacy	8
Social Skills	7
Ecology	7
Agricultural Marketing	6
International Agriculture	2

Required or Elective Courses

Teachers were asked to indicate at each of the 6th, 7th and 8th grade levels if enrollment in agricultural education was required or elective. Table 3 indicates the number of programs in each grade that were required or elective.

Table 7

<u>Required or Elective Courses</u>		
<u>Grade</u>	<u>Required</u>	<u>Elective</u>
6th	2	3
7th	8	9
8th	6	13
Total	16	25

Competition in the Middle or Junior High Schools

Twenty teachers (87%) reported they do provide local competition for middle or junior high school FFA members. Two teachers indicated they do not provide local competition. One teacher did not respond to this question. For those teachers that indicated they did provide local competition, they were asked how that competition was held. The majority of the teachers (14), indicated that competition was held in conjunction with high school FFA events. The same number of teachers also indicated that competition was between schools at a county, area or district level. Nine teachers indicated that competition was held between schools at the state level. Seven teachers said the competition was separate from high school FFA events. Three teachers indicated the competition was held within their own school.

Teachers were asked to list other competition held for the middle or junior high school students. One chapter holds the competition within its chapter. Another program competes with three other middle schools. One program competes against the high school students. One program is held on a federation, area, district and then state level. In Florida a program has a junior chapter division in: ornamental horticulture, livestock judging, poultry judging, vegetable judging and dairy judging. Two teachers said that competition is held at the 6th grade level, while fourteen teachers said the

competition is at the 7th grade level and eighteen teachers said the competition is at the 8th grade level.

Teachers listed the specific local level competitions held for middle or junior high school students. The following is a list of the events in rank order.

Table 8

Contest	Local Competitions
	<u>f</u>
Public Speaking	12
Livestock Judging	11
Soils	8
Creed Speaking	6
Parliamentary Procedures	5
Dairy Judging	5
Forestry Judging	4
Horticulture	4
Horse Judging	2
Tractor Driving	2
Meats Evaluation	2
FFA Quiz	2
Natural Resources Contest	2
Poultry	2
Small Engines	2
Agricultural Mechanics	2
People in Agriculture	1
Junior High Quiz Bowl	1
Essay Contest	1
Interscholastic Judging	1
Seed, Tree ID	1
Poster Contests	1
Entomology	1
Beef Judging	1
Lawn Judging	1
Swine Judging	1
Tractor Trouble Shooting	1
Record Books	1
Open-Closing	1
Tool Identification	1
Electricity	1
Pasture and Range	1

Suggested National FFA Competitions

The teachers were asked to suggest potential national FFA competition/events for middle or junior high school students. They could write in their suggestions as a open-ended response on the questionnaire. Nineteen teachers provided their suggestions.

Four teachers felt that there should not be national competition for this age student. "It should never happen. It would be too much pressure on this age students. We use competition too much when we get FFA members together", said one teacher. Another teacher concurred, that participation should be limited at the national level and culminated at the state level. It was suggested that a "laundry list" of suggested activities and competitive events be provided by the national FFA. Another teacher wrote, "I don't feel that Jr. high students are ready for national competition." One teacher felt that competition was not a middle school concept.

On the other hand, there were four teachers who encouraged national competition. One teacher felt that state winners should advance to national contests. Several felt that there should be separate divisions for junior and senior chapters. "Allow them to "Reach the Stars" as well. As long as competition is within the junior high level. I would include National competition within areas which receive most competition at state levels," said one teacher. By having the competition above the state level, one teacher felt it would keep the FFA strong. Another teacher said, "Have more national contests on the middle school level. The students get discouraged when they win at the state level then do not get to go to Nationals when the other students (high school) get to go."

One teacher felt that as enrollment in the FFA drops, something is needed to encourage students to continue. This teacher feels that since the state started recognizing junior chapters on the state level, interest and competition had increased.

One teacher cautioned the reader about a disadvantage to having competition. When young students compete against high school students with four or five years of experience, it is discouraging to the young students. Junior high level competition would be more favorable. Several teachers shared the same concern. "I feel that it would be nice to be able to compete just against Junior High schools. Even though we have made it to state finals against high school competition."

The contests recommended by one teacher to include on a state and national level include: livestock, forestry, horse, horticulture, dairy and meats. One teacher thought a quiz bowl on FFA history would be a good contest to sponsor.

But another teacher indicated that for schools that have only one instructor for all grade levels, it is important that competitions for grades 7-12 are not all held on the same day. One teacher commented that we will need more programs at the middle school level in place before competitions will be well attended. The dues structure was mentioned by one teacher. "Junior high students should not be expected to pay the same dues as the senior FFA chapter."

Major Encouragers of Enrollment

On an open-ended question, teachers were asked to write in the major encouragers of middle or junior high school enrollment in their agricultural

education programs. The most popular response given by eleven teachers was the FFA activities. FFA contests and the BOAC program were cited as example activities. Four teachers pointed to the "hands on" experiences as the major encourager. Examples of these experience listed include: wood working, small engine maintenance, welding, greenhouse and barn work.

Two teachers indicated that because the course is required by all students, they are encouraged to enroll. The program itself was cited by two teachers, while another cited a strong curriculum. One claimed that the unique subject areas offered, such as farm mechanics, were encouragers.

Another teacher indicated that the variety of teaching techniques demonstrated helped to encourage students to enroll. Social events such as, dances, sporting events and local fair participation were given credit by one teacher.

When one thinks of encouragers to enrollment, one thinks of people. Those identified on the survey included: the agriculture teacher, other FFA members, agriculturists, the fair livestock committee and the publicity provided by the media.

Major Barriers to Student Enrollment

Teachers also reported, on an open-ended question, what they felt were the major barriers to student enrollment in their middle or junior high school agricultural education programs. Five teachers alluded to the notion that most potential students think the program is all about farming. There is a stigma that it is a "farming class". One teacher wrote, "The inner city school students have no interest in Ag or FFA." Another wrote, "The name FFA needs to change."

Five teachers cited scheduling as a barrier to recruitment. As one teacher put it, "We are going against other elective programs." One stated it was difficult to schedule the upper level students. Another teacher reported there was "too much emphasis on college preparation". The enrollment process was cited by another teacher. One teacher reported there weren't enough classes offered. Another stated that there was a problem in placing students who did not want to be in the class when there were others who wanted to enroll and could not get in. Peer pressure also kept some students from entering, according to one teacher. The students "want to be with friends in other classes."

The school system and policies were cited by five teachers. Examples included: no state funds, a lack of facilities, number of teachers, lack of support from administrators and the limited number of field trips.

One teacher said, "all junior high school students have to take 20 weeks of agricultural education" as a barrier. Another reported that the inability to concurrently be in the band and in agricultural education was a barrier. One teacher indicated the failure rate was at fault. Three teachers said there were no barriers to student enrollment.

Major Student Benefits/Outcomes

In order to determine the teachers' opinions of the major benefits/outcomes of middle or junior high school agricultural education program, the teachers were asked to respond to an open ended question. An awareness about agriculture was a popular benefit as indicated by nine teachers. Students could explore the field of agriculture, including careers and non-farm related topics. Another major benefit, cited by eight teachers,

was the chance for students to develop themselves. Students could learn responsibility, respect and human relations skills, as well as develop their leadership skills.

Teachers reported that participation in FFA activities was another benefit. Six teachers cited involvement in the FFA as a benefit. The idea of competition was expressed by three teachers as additional benefits. One teacher said, "students have the opportunity to compete and meet other students".

Students acquire knowledge in agricultural education programs. That knowledge was mentioned by eight teachers as being beneficial to students. The kinds of knowledge attained included: how to speak in public, how to think on their feet and interact with others, how to conduct meetings and vocational skill development, with an emphasis on "hands on" experiences and group experiences.

Students benefit by gaining a wide exposure through agricultural education programs. As one teacher put it, "Students get an earlier exposure to many different subjects which could help them set career goals for the future". Another felt that horizons were expanded through field trips.

Another benefit reported was that students receive recognition for their efforts in the classroom as well as outside the classroom and exposure to the real world. One teacher indicated that the program helped prevent students from dropping out of school. Another commented that gifted children are participating more. One saw an increase in female enrollment. One teacher sees this program orientation at an early age as a way to get greater enrollment later. One saw the program as an elective course.

Disadvantages to Those That Enroll

Teachers were asked in an open-ended question what were the disadvantages to students who enroll in their middle or junior high school agricultural education programs. Twenty-five teachers responded. The most popular response, given by five teachers, was that there were no disadvantages. Two teachers cited burn-out as a disadvantage. Two teachers felt that students were at a disadvantage by not having a supervised occupational experience program. One teacher felt that the small land lab was a disadvantage. One response cited a lack of funds for equipment and supplies. Another felt the class size was too large.

Issues addressing program length were also cited. One teacher said, "I only have the students one year." Another felt that the 18 week program length for 7th graders was a disadvantage. Another said, "Nine weeks will not give the instructor enough time to fully develop the subject matter for the area."

One teacher felt that the major disadvantage was that there was no curriculum for these younger students. One teacher felt that the class can not meet the needs of all the students. Another felt that mandatory vocational agriculture classes were a disadvantage. Yet, other teachers felt there was an image problem with agricultural programs. "Parents are still biased and have misconceptions of what the program is all about", said one teacher. Another added that the program still had a stereotype of being for farmers.

A few teachers saw the agricultural program as a class that prevented students from taking other elective classes like band and remediation courses. Another teacher saw the course as time consuming and said, "If students are really involved in the FFA, it takes away school time."

School Benefits and Outcomes

Teachers were asked to describe the major school benefits/outcomes of their middle or junior high school agricultural education program. Ten of the twenty nine responses described public relations and publicity for the school as major benefits. As one teacher wrote, "The school gets recognized when the FFA chapters win." One teacher felt that the school was getting more county funds as a result of their national success. Many cited community and school service projects, like BOAC, as ways to promote the school. As one teacher wrote, the program "provides for construction of projects for the school and other teachers." Schools were getting a great deal of publicity as a result of students' achievements. "The program contributes regularly to activities the school sponsors and the community sponsors", said one teacher.

Other teachers saw retention and recruitment of students as an advantages to the school. Some thought students were more likely to enroll in the high school agriculture program. One teacher thought that it prevented students from dropping out of school. One teacher commented that he/she got "many of the school troublemakers" and was able to see improvements for these students.

Many teachers credited the program for its instructional value. "Students get to weld, woodwork, garden, harvest crops, etc. These would not be covered in other subject areas." The program was cited as focusing on career and occupational awareness. It also helped to eliminate the stereotype that agriculture is just for farmers. Teachers saw the course as a good elective for the school to offer. One teacher wrote, "We are producing a better well rounded student who is better prepared for the work world." "The students are better off knowing what agriculture and the FFA are about", said another teacher. One teacher thought that the FFA opportunities were a major

benefit for the school. The program was also cited for teaching leadership and self-esteem. One teacher felt that the agriculture class, "gives the school a well-rounded program".

Disadvantages to Schools

When teachers were asked to describe the disadvantages to schools who enroll middle or junior high school students in agricultural education, the majority, 11 teachers, said there were none. Other teachers felt that the following considerations were disadvantages.

- It would be a long time in the FFA
- Could lead to student burn-out
- It would add to scheduling difficulties
- Students don't want to get their expensive shoes dirty
- Lack of community support
- Cost of travel
- Age is a big disadvantage since the student can't compete nationally
- Possibility of a shop-related injury
- Students are force to take agricultural education
- Schools will need additional capital and teachers

Components of Successful Agricultural Programs

Teachers were asked to share their insight as to what are the critical components of a successful middle or junior high school agricultural education programs. They were supplied with example components such as teacher characteristics, student attitudes, parental support, SAEP and facilities.

Many agreed that all of the listed example components were important. Seven teachers listed the parents as important to the success of their programs. "If they see benefits, we gain another reinforcement", said one teacher. Another teacher wrote, "Once the students get involved and start

going FFA crazy, you draw in parents! Parents get curious plus very supportive of your program."

Teachers also saw themselves as critical components. The characteristics that they felt were important included: patience, enthusiasm, flexibility, innovation, enjoy students and love the FFA. As one teacher wrote, "The teacher must like students and love the FFA. Students catch the fever and it spreads." One respondent felt that the teacher needed to spend time outside of the classroom.

One cannot overlook the component of the student as a critical component of the agricultural program. Several teachers cited student attitude and eagerness as a key ingredients. As one teacher put it, "The students should feel they are as important to the program as the upper level students. Attitudes can be developed early. Teachers cannot expect as much because of the maturity level. It is extremely important for students of this age to have adequate hands on experience."

Other components cited included: the facilities, equipment, resource materials, school and county administrative support, advisory committee, FFA alumni chapter, FFA chapter, funding, field trips, SAEP, exposure to leadership development opportunities, diversified teaching materials and methods, a public relations program and FFA contests. One teacher commented, "Parents enjoy their sons and daughters winning in contests".

Components of Successful FFA Chapters

Teachers were given the opportunity to describe the critical components of a successful middle or junior high school FFA program. Examples listed on the questionnaire included: teacher characteristics, students' attitudes,

parental support, SAEP and facilities. Teachers felt that a combination of all of the example components were important. Nine of the teachers' responses described the teacher. The teacher should be enthusiastic, creative, involved, aware and be a strong promoter of the FFA.

Successful FFA programs have a host of supporters including, school administrators, parents, high school FFA chapter, FFA alumni, advisory council and community members. Other components that teachers listed included: leadership, contests, meetings, total participation, coordination of meetings and activities, facilities, SAEP, well planned and varied program of activities and funding.

Recruitment Advantages

Teachers' opinions were surveyed to determine if middle or junior high school membership in the FFA helps to increase membership in the high school FFA. Nineteen teachers believed it did become a recruitment advantage, while two teachers felt it did not. Two teachers did not respond. Teachers explained why they held their opinions through an open-ended question.

Most comments addressed the fact that these students got an earlier exposure to the program and developed a continuing interest in the program. As one teacher wrote, "They realize the benefits and opportunities in FFA and agriculture early! They also gain and understand the new definition of agriculture". Another said, "Helps to spark interest early and this can help retain those students for the up-coming year." One teacher wrote, "They get an opportunity to see what FFA is really all about. This creates a strong interest in continuing with the program." Another commented, "Students who show animals in the fair usually continue to do so through high school".

Another teacher said, "These students are more likely to follow through since they have been exposed to FFA and what it has to offer". To sum things up, one teacher wrote, "Once students are motivated then they stay motivated!"

Having a junior FFA chapter helps to spread the word to other students. Students at this earlier age are less biased about the program. As one teacher wrote, "Students at an earlier age discover what the FFA is all about before peer pressure and stereotypes set in".

One teacher attributed the success of junior FFA programs to the fact that there were fewer sporting activities available to students at this age. Another teacher feels that his "school administration uses this course to help fill his scheduling problems. Therefore we get students who really don't want to be in the class". Another teacher felt that more interest would develop if additional FFA contests for this age group were developed. Another teacher saw a problem because there were no FFA awards for the students from non-farm backgrounds, yet participation from non-farm students has increased.

STUDENT QUESTIONNAIRE RESULTS

Description of the Sample

Student data were collected from 598 students at 23 middle and junior high schools from the nine selected states (Virginia, Wisconsin, Florida, Oklahoma, Georgia, New York, Mississippi, Louisiana and Alabama). The schools that completed and returned questionnaires are listed in Table 9.

Table 9

Schools that Completed and Returned Questionnaires	
<u>State</u>	<u>School</u>
Alabama	Abbeville Middle School Cherokee Middle School Riverside Junior High School
Florida	Deland Middle School Lake City Middle School Beasley Middle School
Georgia	Tift County Junior High School Morgan County Middle School
Louisiana	Lee Road Junior High School Mansura Middle School Iota Junior High
Mississippi	East Marion High School New Hebron - Topeka-Tilton
New York	Madison Central School Tri Valley Central School
Oklahoma	Elgin Holdenville High School Billings
Virginia	E. W. Wyatt Middle School Sugar Grove
Wisconsin	Montello Junior High New Auburn High School Green Bay Edison Middle School

Students' Characteristics

Students were asked to indicate in what grade they were currently enrolled. For the 598 students responding to the questionnaire, 9 students (1.5%) were in 6th grade, 253 students (42.3%) were in 7th grade, 266 (44.5%) were students in 8th grade, 68 (11.4%) in 9th grade, and two students (.3%) do not response the answer.. Thirty-three percent of the sample was female, while 67% was male. Eighty-three percent of the sample was white (Caucasian), 13% was Black, 2% was Native American, 1% was Hispanic, and 1% was Asian.

Students were asked to indicate where they lived. The results indicated that 77.1% (460 students) lived in the country or in a small town, but not on a farm, 16.7% (100 students) lived on a farm and 6.2% (37 students) lived in a large city.

Plans to Enroll in Agriculture Classes in High School

Students were asked whether or not they had planned to enroll in agriculture classes in high school. Fifty-three percent (311 students) said yes, 30% (179 students) said that they were undecided, and 17% (100 students) said no. For those that indicated they had not planned to enroll in agriculture classes in high school, the students were also asked to write in their explanation of why they didn't plan to enroll. The following rank ordered categories summarize the students' responses.

REASONS FOR NOT ENROLLING IN AGRICULTURE CLASSES
IN HIGH SCHOOL

1. Not Interested in Agriculture

"I don't enjoy agriculture." "I don't like agriculture."

"Because I don't want to be a farmer."

39% - 33 reasons.

2. Do Not Want To.

"Because I don't want to".

17% -14 reasons.

3. Want to Take Other Courses.

"I wanted to take other courses."

16% -13 reasons.

4. Classes Are Boring.

"Because it is boring."

7% - 6 reasons.

5. Do Not Have Time.

"Takes a lot of time away." "I can not fit it in my
schedule."

5% - 4 reasons.

6. Have Other Things to Do.

"Because I want to try other things."

5% - 4 reasons.

7. Do Not Need the Classes.

"Because I don't need it."

5% - 4 reasons.

8. Classes Are Not Fun.

"It is not fun."

1% - 1 reason.

9. Plan to Attend a Private School.

"Going to a private school."

1% - 1 reason.

10. Class Are Too Hard.

"It is too hard."

1% - 1 reason.

11. Future Goals Do Not Call For Classes.

"Because my future goals do not call for it."

1% - 1 reason.

12. Do Not Want to Get Hot and Dirty.

"Because I don't want to get hot and dirty."

1% - 1 reason.

13. Mother Will Not Allow Me to Enroll.

"My mother does not let me."

1% - 1 reason.

Plans to Be a Member of the FFA in High School

For students that indicated they had planned to enroll in agriculture classes in high school, they were also asked whether or not they had planned to be a member of the FFA in high school. Eighty-four percent (262 students) said yes, 13% (39 students) said that they were undecided and 3% (11 students) said no. For those that indicated they had not planned to be a member of the FFA in high school, the students were also asked to write in their explanation

of why they didn't plan to become a member. There was a total of 25 quotes. The following rank ordered categories summarize the students' responses.

REASONS FOR NOT BECOMING A MEMBER OF THE FFA
IN HIGH SCHOOL

1. No Interest.

"I am not interested."

32% = 8 reasons

2. Do Not Want To.

"Because I don't want to."

20% = 5 reasons

3. Would Not Enjoy the FFA.

"I wouldn't enjoy the FFA classes."

8% = 2 reasons

4. Have to Take Drama and Chorus.

"Because I have to take drama and chorus."

4% = 1 reason

5. Will Not Have Time.

"I just won't have time."

4% = 1 reason

6. Do Not Want to be Called a Farmer.

"Because I don't want to be called a farmer."

4% = 1 reason

7. It is Stupid.

"Because it is stupid."

4% = 1 reason

8. Do Not Need It.

"Because I don't need it."

4% - 1 reason

9. It is Boring.

"Because is boring."

4% - 1 reason

10. It Will Not Help Me Personally.

"Because I felt it will not help me personally."

4% - 1 reason

11. Do Not Always Like It.

"Because I do not always like it."

4% - 1 reason

12. Do Not Want to Take All of the Tests.

"Because I don't want to take all of tests."

4% - 1 reason

13. Too Expensive.

"Because you'll want too much money."

4% - 1 reason

Influencers on Enrolling in Agriculture Classes

Students were asked to indicate on the questionnaire who influenced them when making a decision to enroll in agriculture classes. Table 10 indicates (1) the people with whom the student discussed their decision to enroll in agriculture classes and (2) the extent of influence.

From the data in Table 10, it is evident that the agriculture teacher was the person who most encouraged the students to enroll in their agriculture

classes. Students' fathers and mothers also tended to encourage students to enroll. The data show that students' friends were most likely to discourage them from enrolling, however only 5.8% indicated they were discouraged by friends.

Students' fathers and mothers were usually encouragers or else were not consulted. Students seldom talked with their brothers, sisters, other relatives, guidance counselors or other teachers about their decision to not enroll.

Table 10

Influencers on Enrolling in Agriculture Classes				
	* Extent of Encouragement			
	1	2	3	4
1. Friend(s)	5.8%	34.3%	26.6%	33.3%
2. Father/male guardian	1.2%	23.0%	37.7%	38.1%
3. Mother/female guardian	3.3%	24.1%	36.6%	36.0%
4. Brother(s)/sister(s)	3.9%	25.5%	19.4%	51.2%
5. Other relative	2.3%	22.4%	23.6%	51.7%
6. Guidance Counselor	1.1%	23.8%	17.6%	57.5%
7. Agriculture teacher	1.2%	11.5%	69.1%	18.2%
8. Other teachers	1.9%	21.4%	16.1%	60.6%

*1 = Discouraged me
 2 = Neither discouraged me nor encouraged me
 3 = Encouraged me
 4 = Did not talk with me on this decision

Required or Elective Class

Students were asked whether or not the agriculture class in which they were enrolled was required. Fifty-six percent of the students indicated that the agriculture class in which they were enrolled was not required, while 44% indicated that it was required.

Reasons for Enrolling in Agriculture Class

For those that indicated the agriculture class in which they were enrolled was not required, the students were also asked to write in their reasons for enrolling in the agriculture class. There were a total of 309 reasons given. The following rank order of categories summarizes the students' responses.

1. It is a fun class.

"It is a fun class."

14.2% - 44 reasons.

2. You learn about agriculture.

"You learn about agriculture."

13.6% - 42 reasons.

3. You learn about animals.

"Because I like animals." "I like wildlife."

8.4% - 26 reasons.

4. I like to work with my hands.

"I love working with tools." "To work in the shop." "I wanted to wood work".

7.1% - 22 reasons.

5. I didn't want to be in other courses.
"Because I didn't want to take band." "To not take reading."
"Because I don't like art."
7.1% = 22 reasons.
6. I am interested in the FFA.
"Joining the FFA."
6.1% = 19 reasons.
7. I didn't enroll, I was placed.
"They picked it for me."
5.1% = 16 reasons.
8. I am interested in it.
"I am interested in it."
5.1% = 16 reasons.
9. I like the course.
"Because I like the course."
4.5% = 14 reasons.
10. People encouraged me.
"My brother/sister encouraged me." "Friends encouraged me."
"Parents encouraged me."
4.5% = 14 reasons.
11. I wanted to.
"I wanted to."
4% = 12 reasons.
12. To try something different.
"To try something different."
3.6% = 11 reasons.

13. Activities in the Class.

"To go on Trips." "It help you to learn more about leadership." "To do things." "Learning to speak in public."
 "Hunters safety." "Boasters safety." "To learn responsibility."

3.2% - 10 reasons.

14. To learn about different things.

"To learn about different things."

3% - 9 reasons.

15. Because I had nothing better to do.

"Because I had nothing better to do."

2.5% - 8 reasons..

16. Suitable elective class.

"I would like to finish my agriculture classes." "To get a high school credit and to see what would be like." "I thought it would be OK." "Had to have another class." "Just to be in this class." "Because we had to pick a class." "To give me something that I could enjoy." "Because I didn't like business."

2.5% - 8 reasons.

17. I like the teacher.

"I like the teacher."

1.3% - 4 reasons.

18. Other reasons

In addition to the reasons above listed, students indicated the following reasons for enrolling in agriculture class.

"It was easy." (1% - 3 reasons).

"Don't know." (.7% - 2 responses).

"It is different."(.32% = 1 reason).

"It help a person understand how to have a well developed life."(.32% = 1 reason).

"I just did it."(.32% = 1 reason).

"Academic ability rank in society."(.32% = 1 reason).

"I was stupid."(.32% = 1 reason).

"I like to be around people."(.32% = 1 reason).

"To get a good job after high school."(.32% = 1 reason).

What Students Like Best About the Agriculture Class

Students were asked to respond to an open-ended question regarding what they like best about their agriculture class. The 598 students could list as many responses as they wished. There was a total of 585 quotes. Nineteen categories were developed and are listed below in rank order.

1. I Like to Work With My Hands.

"Working in shop." "Hand on things." "You learn how to use tools."

31% = 181 responses.

2. It Is Fun.

"It is a fun class." "It is nice." "It is exciting."

9.2% = 54 responses.

3. Planting Plants.

"You plant plants." "Going to the greenhouse."

7.3% = 43 responses.

4. Learning About Animals.

"Working with animals."

6.6% = 39 responses.

5. Learning About Different Things.

"You learn about different things."

6.5% = 38 responses.

6. Working Outdoors.

"You go outside."

5.3% = 31 responses.

7. The Teacher and Teaching.

"The teacher."

5% = 29 responses.

8. It Is Easy.

"It is easy." "You don't have a lot of homework." "You don't get tests."

4.8% = 28 responses.

9. Learning About Farming.

"You learn about farming."

4.6% = 27 responses.

10. The Activities.

"The ice cream day." "The parties." "Playing Games".

3.9% = 23 responses.

11. Field Trips.

"Field trips."

3.1% = 18 responses.

12. Work With Different Things.

"Work with different things."

3.1% = 18 responses.

13. Nothing.

"Nothing."

2.1% = 12 responses.

14. Watching Films.

"When we watch movies."

1.9% = 11 responses.

15. Everything

"Everything."

1.4% = 8 responses.

16. I Get to See My Friends.

"I get to see my friends."

1.2% = 7 responses.

17. The Projects.

"The projects."

1% = 6 responses.

18. To Meet People.

"To meet new people." "You meet people."

1% = 6 responses.

19. Other responses.

"It'll help me a little help with business." (.34% = 2 responses.)

"Helping my community." (.17% = 1 response.)

"It is always organized." (.17% = 1 response.)

"It is a big class." (.17% = 1 response.)

"The experience of team work." (.17% = 1 response.)

What Students Like Best About Their Agriculture Teacher

On an open-ended question, students were asked to write in what they like best about their agriculture teacher. Students could list as many responses as they desired. When data were analyzed, 445 responses were listed. Twenty-five categories were developed and are listed below in rank order, along with direct students quotes and the percent of responses in each category.

1. The Teacher Is Nice.

"Teacher is pleasant." "Teacher is nice." "Teacher cares for their students."

28.1% - 174 responses.

2. The Teacher Is Funny.

"Teacher has good sense of humor." "Teacher is goofy."

18.2% - 113 responses.

3. The Teacher Help Students.

"The teacher helps students."

8.4% - 52 responses.

4. The Teaching Method Used.

"The way teacher teaches the class." "The explanations are very clear."

"Teacher tell good stories."

8.3% - 51 responses.

5. The Teacher Is Good.

"It is a good teacher."

5% - 31 responses.

6. Teacher Allows You Freedoms.
"Teacher is not strict." "Teacher does not give any homework." "Teacher does not put pressure on you."
4.5% - 28 responses.
7. The Teacher Is Encouraging.
"Encouraging."
3% - 19 responses.
8. Nothing
"Nothing."
2.6% - 16 responses.
9. The Teacher Is Cool.
"The teacher is cool."
2.4% - 15 responses.
10. The Teacher Is Understanding.
"Teacher is understanding."
2.4% - 15 responses.
11. The Teacher Teaches Different Things.
"The teacher teaches you different things."
2.1% - 13 responses.
12. There Is Not Much Work Involved.
"Teacher hasn't given a lot of work."
1.9% - 12 responses.
13. The Teacher Explains Things To You.
"Teacher explain stuff to you."
1.7% - 11 responses.

14. The Teacher Lets Us Work In The Shop.

"Teacher letting us work in the shop a lot."

1.7% - 11 responses.

15. The Teacher Is Interesting.

"Teacher is interesting."

1.1% - 7 responses.

16. The Teacher Knows What He/She Is Talking About.

"Teacher knows what it is talking about."

.97% - 6 responses.

17. Everything

"Everything."

.97% - 6 responses.

18. The Teacher Is Smart.

"Teacher is smart."

.97% - 6 responses.

19. The Teacher's Haircut and His Ties.

"The teacher haircut." "The ties."

.97% - 6 responses.

20. Teacher Lets You Do Anything.

"Teacher lets you do anything."

.8% - 5 responses.

21. The Teacher Takes Us On Trips.

"Teacher takes us on trips."

.8% - 5 responses.

22. The Teacher Is Sweet.

"Teacher is sweet."

.8% = 5 responses.

23. Other Responses.

"I don't know." (.60% = 4 responses)

"Teacher likes animals." (.32% = 2 responses)

"Teacher desire to be the best." (.16% = 1 response)

"Teacher work hard." (.16% = 1 response)

"Teacher is different." (.16% = 1 response)

"Teacher is young." (.16% = 1 response)

"Teacher spent \$150.00 on us at a restaurant." (.16% = 1 response)

What Students Like Least About Their Agriculture Class

Students were asked to write what they like least about their agriculture class. The students could list as many responses as they wished. There were a total of 498 quotes. Fourteen categories were developed and are listed below in rank order.

1. Nothing

"Nothing."

18.6% = 93 responses.

2. The Classroom Work.

"The class work."

14.6% = 73 responses.

3. The Kind of Work.

"Cleaning the shop." "Working in the greenhouse." "Crushing cans."

11.4% = 57 responses.

4. The Class Is Boring.
"The class drags." "Don't do much." "Sitting around."
12.7% - 63 responses.
5. Taking Notes.
"Too much notes."
10.4% - 52 responses.
6. The Topic Studied.
"Studying speech." "Studying about animals." "The cow unit."
6.8% - 34 responses.
7. Taking Tests.
"Taking tests."
5.4% - 27 responses.
8. Staying Indoors.
"We don't get to go outside a lot."
4.2% - 21 responses.
9. Environment of the Classroom.
"Environment of the classroom."
3.2% - 16 responses.
10. People Enrolled.
"Some of the people that are in it." "Too many snobs." "A bunch of nerds."
3% - 15 responses.
11. Schedule of the Class and Size of the Group.
"The class is too small." "The class is not long enough." "We only have it
once every other day."
2.2% - 11 responses.

12. Movies and Filmstrips.

"Movies and filmstrips."

1.8% = 9 responses.

13. Too Much Home Work.

"Too much home work."

1.2% = 6 responses.

14. Other responses.

"Fusses too much."(.8% = 4 responses.)

"It is harder than most classes."(.4% = 2 responses)

"Everything."(.4% = 2 responses)

"Seeing animals die."(.4% = 2 responses)

"Substitutes."(.2% = 1 response)

"I don't know."(.2% = 1 response)

"Having class in winter."(.2% = 1 response)

"When we get too much pressure."(.2% = 1 response)

"Having to leave to go to my next class."(.2% = 1 response)

"The farm." (.2% = 1 response)

"It has lots of things that I don't understand."(.2% = 1 response)

"Having to walk all the way to the class."(.2% = 1 response)

"Boys do most of the work."(.2% = 1 response)

"When it is raining you can not do anything."(.2% = 1 response)

"To membership took to long."(.2% = 1 response).

What Students Like Least About Their Agriculture Teacher

Students were asked to write what they like least about their agriculture teacher. The students could list as many responses as they wished. There

were a total of 414 quotes. Ten categories were developed and are listed below in rank order.

1. Nothing

"Nothing."

42.2% - 175 responses.

2. Teacher Personality.

"Teacher nags too much." "Teacher yells too much." "Teacher bad temper."

30% - 123 responses.

3. Teacher Over Works Students.

"Teacher makes us to do the writing." "Teacher gives us so many notes."

"Teacher pushes things a lot."

11% - 46 responses.

4. Punishments Tactics.

"Teacher has strict punishments." "Teacher hits us with a paddle." "Teacher hits too hard."

3.1% - 13 responses.

5. I don't know.

"I don't know."

2.4% - 10 responses.

6. Teacher Does Not Let Us Do What We Want To.

"Teacher does not let us work in the shop." "Teacher not letting us go to the barn."

2.4% - 10 responses.

7. The Teacher Tries to be Funny.

"Teacher jokes."

1.6% - 7 responses.

8. Teacher Makes Us Do Things That We Do Not Want To.

"Teacher make us study animals." "Copying of the board."

"Selling fruits."

1.6% = 7 responses.

9. The Teacher's Haircut.

"The teacher haircut."

1.2% = 5 responses.

10. Other responses.

"Teacher is always busy and is sometimes hard to find it."(.5% = 2 responses)

"Everything."(.5% = 2 responses)

"It is not help you."(.2% = 1 response)

"There is not enough of him."(.2% = 1 response)

"Teacher use words that I can not understand."(.2% = 1 response)

"Teacher remember when you bad."(.2% = 1 response)

"The teacher sloppy handwriting."(.2% = 1 response)

"That she is not my mother."(.2% = 1 response)

"Teacher does not give a lot of homework."(.2% = 1 response)

"I only see the teacher in the school."(.2% = 1 response)

"Teacher is stupid."(.2% = 1 response)

"Teacher smokes."(.2% = 1 response)

"Teacher bug me about earring."(.2% = 1 response)

"Teacher is gone a lot."(.2% = 1 response)

"Teacher let us fight."(.2% = 1 response)

"Don't give enough tests."(.2% = 1 response).

Membership in the FFA

Students were asked whether or not they were members of the FFA. Seventy-one percent of the students said yes, while 29% said no. For those that indicated that they were members of the FFA, the students were asked how many years they have been members of FFA. Sixty-six percent indicated that they have been members of the FFA for one year, 30% for two years, 3% for three years and 1% for four years.

What Students Like Best About Being a Member of the FFA

Students who reported that they were members of the FFA were asked what they like best about being a member of the FFA. The students could list as many responses as they wished. There were a total of 401 quotes. Sixteen categories were developed and are listed below in rank order.

1. Trips

"You go to conventions, camps, etc."

16.2% = 65 responses.

2. Meeting People.

"You get to meet people."

13.4% = 54 responses.

3. Having Fun.

"You do a lot of fun things."

13.4% = 54 responses.

4. Activities.

"Activities."

13.4% = 54 responses.

5. Contests.

"Contests."

7.5% - 30 responses.

6. Learning Things.

"You can learn a lot of stuff."

6.2% - 25 responses.

7. Meetings.

"Meetings."

5.2% - 21 responses.

8. Working with Animals.

"Working with animals."

3.9% - 16 responses.

9. Everything.

"Everything."

3.5% - 14 responses.

10. Has Some Advantages.

"FFA gives you confidence." "Making money." "Being able working with people."

3.5% - 14 responses.

11. Getting Out of Class.

"Getting out of class."

3% - 12 responses.

11. Social Events.

"We went and got pizza." "Having cook outs."

2.2% - 9 responses.

12. I Don't Know.

"I don't know."

2.2% = 9 responses.

13. Having Opportunities.

"It gives us a lot of opportunities."

1.9% = 8 responses.

14. Selling Items.

"Sell stuff." "Getting to sale fruits."

1.2% = 5 responses.

15. Other responses.

"The teacher."(1% = 4 responses)

"Nothing."(.7% = 3 responses)

"The people I work with."(.5% = 2 responses)

"Club schedule."(.2% = 1 response)

"Only had to pay \$3.00 to get in."(.2% = 1 response).

What Students Like Least About Being a Member of the FFA

On the other hand, students were asked about what they like least about being a member of the FFA. The students could list as many responses as they wished. There were a total of 278 quotes. Seventeen categories were developed and are listed below in rank order.

1. Nothing.

"Nothing."

51% = 142 responses.

2. The Work.

"The work."

9.3% = 26 responses.

3. I Don't Know.

"I don't know."

6.1% = 17 responses.

4. Lack of Things to Do.

"Not enough stuff to do." "Boring sometimes."

6.1% = 17 responses.

5. Have to Do Things Related With the Organization.

"Learning the Creed". "Parliamentary procedure." "The
Convention."

5.7% = 16 responses.

6. It Takes a Lot of Your Time.

"It takes up a lot of your time." "I don't have enough time."

3.5% = 10 responses.

7. Dues.

"Paying dues."

2.1% = 6 responses.

8. The meetings.

"The first part of the meetings." "Too many meetings."

2.1% = 6 responses.

9. The Stereotype of Being a Farmer.

"The stereotyping of be a farmer."

2.1% = 6 responses.

10. FFA Jacket.

"The way the Jackets are designed."

1.8% = 5 responses.

11. Lack of Competition.

"Not enough contests on middle school level."

1.4% = 4 responses.

12. Being the Youngest in FFA.

"Being the youngest in FFA."

1.4% = 4 responses.

13. Not Going on Trips.

"Don't go on any trips."

1.4% = 4 responses.

14. Delivering Fruit.

"Delivering the fruits."

1.4% = 4 responses.

15. Class.

"Class."

1% = 3 responses.

16. Other responses.

"Too much people."(.35% = 1 response)

"The organization beg too much money."(.35% = 1 response)

"You have to sit next to partners."(.35% = 1 response)

"I can't stay one forever."(.35% = 1 response)

"Everything."(.35% = 1 response)

"They don't let us go sometimes."(.35% = 1 response)

"Not as much advantages as high school."(.35% = 1 response)

"Not knowing what animals to raise."(.35% = 1 response).

SUMMARY & RECOMMENDATIONS

Nationally, enrollment in secondary agricultural education programs and membership in the FFA is declining. It has been suggested that if middle schools offered exploratory agricultural education programs, those students enrolled would remain in the secondary school agricultural education programs. It was further suggested that if enrollment in agricultural education increased, membership in the FFA servicing those students also would increase. Membership also would increase if middle school students were given an opportunity to join the FFA. However, others have suggested that students could become disenchanted or bored with extended programs and drop out of secondary agricultural education programs and membership in the FFA.

Purpose and Objectives

This study was funded by the National FFA Organization. Its major purpose was to determine the current status of middle and junior high school agricultural education and FFA programs. Middle and junior high school students were defined as those enrolled in grades 6, 7, and 8. Specifically, the objectives were as follows:

1. To establish national baseline information regarding middle and junior high school enrollment in agricultural education and membership in the National FFA Organization.
2. To identify features and critical components of selected successful middle and junior high school agricultural education programs.
3. To identify factors influencing students' decisions to enroll in middle and junior high school agricultural education programs and become members in the National FFA Organization.

4. To determine why middle and junior high school students do not plan to enroll in agricultural education classes or become members of the FFA in high school.
5. To identify the perceived benefits and disadvantages of middle and junior high school agricultural education programs.

Procedures

This descriptive study was conducted in the Spring of 1991. Questionnaires were sent to all State FFA Executive Secretaries (N=53). Additionally nine states were identified as having middle or junior high agricultural education school programs (i.e., Alabama, Florida, Georgia, Louisiana, Mississippi, New York, Oklahoma, Virginia and Wisconsin). Each state FFA executive secretary in the states identified above was asked to identify three successful middle or junior high school agricultural education programs. Programs were deemed to be successful if they were experiencing stable or increasing FFA membership. These programs were to be geographically distributed across the state. Three teachers in each of the selected states were also sent questionnaires (n=27). These middle or junior high school teachers also collected information from one of their classes by questionnaire.

A total of 52 of the 53 (98%) state FFA executive secretaries returned their questionnaires. The number of teacher questionnaires that were returned was 23 (85%). The teachers collected information from 598 students in their middle or junior high school agriculture classes. The validity of the questionnaires was established by use of a panel of experts. The test-retest reliability resulted in coefficients of stability ranging from .78 to .89.

Results

This summary is organized around the objectives of the study. The specific data and information follow the statement of the objective.

Objective 1: To establish national baseline information regarding middle and junior high school enrollment in agricultural education and membership in the National FFA Organization.

The earliest middle or junior high school agricultural education program was reported being conducted for eighth graders in 1926 by Virginia. Vermont reported seventh grade programs as early as 1930. Sixth grade programs were more recent developments, with Mississippi reporting the first program in 1974. Nationally, a total of 30 states reported having a middle or junior high school agricultural education program of some type.

Membership in the FFA was first accepted for eighth graders by Virginia in 1926. Seventh graders were first accepted for membership in 1960 by Louisiana. Most recently, Mississippi reported accepting sixth graders in 1974. A total of 19 states reported some type of FFA activities for middle or junior high school students.

The state FFA executive secretaries reported a total of 52,968 individuals were enrolled in middle or junior high school agricultural education programs. Of this total, 17,722 (33%) were members of the FFA. The eighth grade reported the largest enrollment in agricultural education (29,988) with approximately 43% (12,868) of these students belong to the FFA. Similar data also was reported in the nine selected states.

Demographic information was also collected from the students in the nine selected states. Of these students, 83% were white, 13% were Black, 2% were Native American, 1% were Hispanic, and 1% were Asian. When comparisons were made by gender, 67% were male and 33% were female. When asked to indicate where they lived, the majority (77.1%) reported living in the country or in a

small town, but not on a farm; 16.7% reported living on a farm; and 6.2% reported living in a large city. Fifty-six percent of the students indicated that agricultural education was an elective class and 44% stated that it was a required class.

A total of 17 (33%) state FFA executive secretaries reported that they provided some type of state level competition for middle or junior high school FFA members. Four reported competition was held at the sixth grade level, 14 reported competition at the seventh grade level, and all 17 reported competition at the eighth grade level. The majority (14) reported holding this competition in conjunction with secondary school FFA events. The more popular state competitions reported included: creed speaking, livestock judging, public speaking, crops, and showing livestock. A total of 14 (27%) indicated that there should not be national competition for middle or junior high school students. Those who did favor national competitions recommended activities such as quiz bowls, essay contests, creed speaking, and tool and material identification. Twenty (87%) of the teachers reported local competitions for middle or junior high school FFA members. Most of these teachers (14) reported that the competition was held in conjunction with high school FFA events. Some popular local competitions included: public speaking, livestock judging, soils, and creed speaking. There was mixed reaction to national competitions. If it were to be held, teachers suggested competition in the areas of livestock, forestry, horse, horticulture, dairy and meats contests or a quiz bowl on FFA history.

Twelve of the states indicated that the middle or junior high school FFA chapter was organized separately from that of the secondary school. Whereas, 24 states reported the chapter was a joint chapter with the high school FFA.

One state reported having junior chapters working with high school chapters and one state reported having mini chapters.

Some type of dues was required for middle or junior high school FFA members in 27 states. These dues ranged from \$.50 to \$8.00. The average dues were approximately \$4.00. A total of 31 state FFA executive secretaries reported that middle or junior high school programs were funded with local funds, 14 reported using state funds, and 7 reported using federal funds.

Objective 2: To identify features and critical components of selected successful middle and junior high school agricultural education programs.

State FFA executive secretaries reported middle or junior high school agricultural education programs ranging from 6 to 36 weeks in length. The topics reported to be in the core curriculum included 23 different items. Only six of these topics were reported in common by at least one-half of the 14 state FFA executive secretaries reporting core curricula: plant science, career exploration, agricultural literacy, animal science, conservation, and mathematics. Teachers in the nine selected states reported their programs ranged from 4-36 weeks in length. The most popular topics in the curriculum reported by the teachers included animal science, history of the FFA, leadership, and plant science.

The local teachers indicated that there were several components to a middle or junior high school agricultural education program. Among these components were: parents who are supportive; teachers who are patient, enthusiastic, flexible, innovative, concerned with and enjoy students, and love the FFA; students with good attitudes and eagerness; facilities; equipment; resource materials; administrative support; advisory committees; FFA alumni chapter; FFA chapter; funding; field trips; supervised agricultural experience programs; exposure to leadership development opportunities;

diversified teaching materials and methods; a public relations program; and FFA contests.

Components of a successful FFA chapter for middle or junior high school students were also similar. A teacher that is enthusiastic, creative, involved, aware and a strong promoter of the FFA was the component reported most often. Other components included: support from groups such as school administrators, parents, high school FFA chapter, FFA alumni, advisory council and community members; leadership; contests; meetings; total participation; coordination of meetings and activities; facilities; supervised agricultural experience programs; well planned and varied program of activities; and funding.

Objective 3: To identify factors influencing students' decisions to enroll in middle and junior high school agricultural education programs and become members in the National FFA Organization.

The state FFA executive secretaries indicated that the major factor encouraging middle or junior high school students to enroll was their agricultural education instructor. Other factors included the FFA activities; the program; other people such as school administrators, counselors, parents, brothers and sisters, FFA advisors, current and former students and selected teachers; students special interest in agriculture; use of agricultural education to teach career development, technology and science skills, and agricultural literacy; availability of curriculum materials; required courses; and the short length of the program. The teachers reported similar factors.

Information from the student questionnaires also served as a source of information for this objective. The students clearly identified their local agriculture teacher as the person who most encouraged them to enroll in middle or junior high school agricultural education programs. Students' fathers,

mothers, and friends also tended to encourage students to enroll in these programs. Students reported that they seldom talked with their brothers, sisters, other relatives, or other teachers regarding their decision to enroll in agricultural education programs.

The major reasons students indicated that they enrolled in the agricultural education program included that they wanted to learn about agriculture, thought the class and its activities were "fun," and liked to work with their hands. Students were also asked to report what they liked best and least about their agricultural education class. The items they liked best included working with their hands, learning about plants and animals, working outdoors, and the teacher. The items they liked least included the classroom work, kind of work, boring class, and taking notes.

When students were asked if they were in the FFA, 71% reported being members and 29% indicated they were not. The things the FFA members reported liking best included: attending the meetings and activities, meeting people, and having fun. The things they reported liking least about the FFA were: the work involved, lack of activities, and learning about the creed and parliamentary procedure.

Information also was collected on the major barriers to having students enroll in middle or junior high school agricultural education programs. The state FFA executive secretaries indicated school policies (e.g., funding, shortage of staff) to be the major barrier to student enrollment. They also reported scheduling and the perception that agriculture lacked opportunities as barriers to student enrollment. Teachers in the nine selected states reported similar views.

Objective 4: To determine why students do not plan to enroll in agricultural education classes or become members of the FFA in high school.

The students were also asked to indicate if they would enroll in agricultural education and become FFA members in secondary school. A total of 53% of the students reported they planned to enroll in agriculture classes in high school, 30% were undecided, and 17% said they would not enroll. The most often cited reasons for not enrolling in agriculture classes in high school included not being interested in agriculture and wanting to take other courses. When asked about becoming a member of the FFA in high school, 84% indicated they did plan to join, 13% were undecided and 3% said no. The reasons most often cited for not becoming a FFA member in high school included the lack of interest in the FFA and wanting to become involved in other activities.

Objective 5: To identify the perceived benefits and disadvantages of agricultural education programs.

The state FFA executive secretaries indicated that increased agricultural literacy was the major student benefit of middle or junior high school agricultural education programs. They also indicated that it would help to increase the enrollment in secondary agricultural education programs. Other benefits identified included: participation in the FFA, career awareness, leadership development, reduced drop-out rates, and increased self esteem. Teachers again reported perceived benefits similar to those identified by the state FFA executive secretaries. Some additional benefits of middle and junior high school agricultural education programs identified by the teachers included: occupational exploration; increased responsibility, respect, human relations skills, speaking ability, and student recognition; and increasing enrollments of nontraditional students (e.g., females, minorities, gifted, etc.).

Fewer disadvantages were reported for students who enroll in middle or junior high school agricultural education programs. The state FFA executive secretaries indicated that there was a possibility for increasing burn out of students, the lack of preparation that agriculture teachers have to work with middle or junior high school students, the potential for duplicating course work with secondary school courses, the possibility of decreasing the time available for other career exploration courses, increased competition with other courses, and potential resistance from school administrators. Again, similar disadvantages were cited by the teachers in the selected states. Some additional disadvantages included the lack of facilities and funding, too large of class sizes, and inadequate curriculum.

Recommendations

The National Research Council's (1988) recommendation that agricultural education should include instruction about agriculture provides a basic rationale for middle and junior high school agriculture programs. Its recommendations for using agriculture to teach science, agricultural literacy, career exploration, and community involvement offer specific instructional approaches for middle school programs. The following recommendations are offered for the national, state, and local level for establishing these programs.

National Level

1. Since the FFA is an intracurricular activity, The National FFA Organization, the U.S. Department of Education, and the U.S. Department of Agriculture should encourage development of a middle and/or junior high school agricultural education core curricula that includes its mission, content, goals and objectives, experiential learning strategies, articulation with other agricultural education programs and funding options prior to expanding FFA programs to that level.
2. Promotional efforts to increase middle and junior high school membership in the FFA should give particular attention to attracting underrepresented groups such as minorities and females. It should also target specific promotions for students in urban and suburban areas.
3. Designers of agricultural education and FFA programs for the middle and junior high school programs should ensure that the programs are distinct from senior high school programs.
4. The National FFA Organization should not develop national competitive events for middle and junior high school students at this time.

State Level

1. State education agencies and teacher education programs should design programs that would prepare current and prospective teachers to work with middle and junior high school students.
2. State education agencies should establish criteria for teacher certificates and funding options for agricultural education programs at the middle and junior high school level.

3. State supervisors, teacher educators and agricultural education teachers and middle school educators should design competitive events for middle and junior high school students, separate from high school competitions.

Local Level

1. Agricultural educators should not encourage combined FFA organizations for middle and junior high school students with high school students.
2. Agricultural education teachers should develop promotional materials that clearly indicate the benefits of participating in middle and junior high school agriculture and FFA programs.
3. Agricultural education teachers should work with boards of education, administrators, and guidance counselors in establishing policies (e.g., funding, scheduling, staffing) that are conducive to middle and junior high school agricultural education and FFA programs.

REFERENCES

- Becker, H.J. (1990). Curriculum and Instruction in Middle Grade Schools. Phi Delta Kappan, 71(6), 450-457.
- Birkenholz, B. (1990, July). Expanding Our Mission: Pre-Secondary Agricultural Education. The Agricultural Education Magazine, 63(1), 12.
- Cheek, J.G, and others. (1985, October). Elementary and Pre-Vocational Programs in Agriculture. The Agricultural Educational Magazine, 58(4), 4.
- Deeds, J.P, McGrew, B. & James, L. (1990, July). Junior FFA for Pre-Secondary Students. The Agriculture Education Magazine, 63(1), 22-23.
- Doese, E.K. & Miller, W. W. (1988). Factors Affecting The Future Enrollment of Students in Vocational Agriculture.
- Elliot, J.F. (1988). Factors Related to the Decisions of Rural Public High School Students to Participate in Vocational Education. Columbus, OH: The Ohio State University, Department of Agricultural Education.
- Epstein, J. L. (1990). What Matters in the Middle Grade- Grade Span or Practices? Phi Delta Kappan 71(6), 438-444.
- Hedrich, C. (1985, October). Vocational Agriculture for 7th and 8th Graders. The Agricultural Education Magazine, 58(4), 20-21.
- Herren, R.V. & Denham, A. (1990, September). Agricultural Education at the Middle School. The Agricultural Education Magazine, 63(3), 15.
- Jackson, S. & Bosma, H. (1990). Coping and self-concept: Retrospect and prospect. In H. Bosma & S. Jackson (Eds.) Coping and self concept in adolescence. Heidelberg: Springre-Verlag.
- Luft, V.D. (1990, July). Junior High Agriculture: A Means of Expanding Our Instruction. The Agricultural Education Magazine, 63(1), 18.
- National Research Council. (1988). Understanding Agriculture. New Directions for Education. Washington D.C.: National Academy Press.
- Phipps, L.J., & Osborne, E.W. (1988). Handbook on Agricultural Education in Public Schools, 5th ed. Illinois: Interstate.
- Rossetti, R., Elliot, J., Price, C.L., & McClay P. (1989). Factors that Influence a Student Not to Enter Into a High School Vocational Curriculum. Columbus, OH: The Ohio State University, Department of Agricultural education.
- Smick, R. & Seibel, R. (1984). Teacher Perception: FFA Membership in Vocational Agriculture Courses. Proceedings of the Research Conference in Agricultural Education. Eastern Region (Sturbridge, Massachusetts, May. 18-19, 1984)

APPENDIX A

Questionnaire on Middle and
Junior High School Enrollment
State FFA Executive Secretaries

Questionnaire on Middle or
Junior High School Enrollment
Teachers of Agricultural Education

Questionnaire for Middle and
Junior High School
Students of Agricultural Education

**QUESTIONNAIRE ON MIDDLE AND JUNIOR HIGH SCHOOL ENROLLMENT
STATE FFA EXECUTIVE SECRETARIES**

Instructions -

The purpose of this study is to investigate factors related to middle and junior high school (6th, 7th and 8th grade) enrollment in agricultural education and membership in the FFA. Since states define middle and junior high school students differently, please report data by each grade level. Include data of funded as well as non-funded programs. Think of agricultural education programs as including those as short as 6 weeks or as long as a full year.

Name _____

State _____

Telephone No. (____) _____

If you do **not** have any middle or junior high school enrollment in agricultural education, this completes the required information. Please return the questionnaire.

For those states with middle or junior high school enrollment in agricultural education, continue to answer the questions on the following pages.

1. Please indicate your state's 1989-90 enrollment in agricultural education, typical length of program, and membership in the FFA for each of the following grade levels. If you did not have any student enrollment at a particular grade level, please place a N/A in the spaces provided.

Grade	Agricultural Education			FFA	
	No. of Schools	No. of Students	Typical Length of Program (Weeks)	No. of Schools	No. of Students
6th	_____	_____	_____	_____	_____
7th	_____	_____	_____	_____	_____
8th	_____	_____	_____	_____	_____
Total	_____	_____	_____	_____	_____

2. In what year did your state first begin enrolling students in agricultural education and accepting membership in the FFA at each of the following grades?

Grade	Agricultural Education	FFA
6th	_____	_____
7th	_____	_____
8th	_____	_____

3. In what year did your state first allow for middle or junior high school FFA membership? _____

4. Do you have a core curriculum (common information for all students) for your middle or junior high school agricultural education programs?

___ Yes ___ No

If No, go to question 5

If Yes, please attach a copy of the course outline and check any of the following topics that are included:

- | | |
|-----------------------------|--|
| ___ Agricultural literacy | ___ Human relations |
| ___ Agricultural mechanics | ___ Agricultural marketing |
| ___ Animal science | ___ Ecology |
| ___ Plant science | ___ Conservation |
| ___ Employability skills | ___ Using microcomputers |
| ___ Soil science | ___ Supervised agricultural experience |
| ___ Career exploration | ___ International agriculture |
| ___ History of FFA | ___ Leadership |
| ___ Role of FFA | ___ Writing |
| ___ FFA meeting procedures | ___ Mathematics |
| ___ Parliamentary procedure | ___ Social skills |
| ___ Public speaking | |

5. Does your state provide state level competition for middle or junior high school FFA members? ___ Yes ___ No

If No, go to question 6

- a. If Yes, indicate how this middle or junior high school competition is held and the grade levels for this competition.

- ___ In conjunction with high school FFA events
 ___ Separate from high school FFA events
 ___ Other _____
 (Please specify)

b. Grade levels included:

6th
 7th
 8th

c. List the specific state level competitions held for middle or junior high school students.

6. What are your suggestions regarding potential national FFA competition/events for middle or junior high school students?

7. How do local schools organize their middle or junior high school FFA chapters?

Separate chapters from high school FFA
 Joint chapters with high school FFA
 Other _____
(Please Specify)

8. Do you require state FFA dues for middle or junior high school members?

Yes No

If No, go to Question 9

If Yes, how much are your middle or junior high school members' dues?

\$ _____

9. Please check which of the following types of funding are used to finance middle or junior high school programs of agricultural education?

Federal funds
 State funds
 Local funds

10. Please check which of the following sources of funds are used to finance middle or junior high school programs of agricultural education?

- Agricultural education
- Science education
- Elementary education
- Secondary education
- Foundation(s)
- Other

_____ (Please Specify)

11. What are the major encouragers of middle or junior high school enrollment in your state's agricultural education program.

12. What are the major barriers to student enrollment in your state's middle or junior high school agricultural education programs in your state?

13. What are the major student benefits/outcomes of your state's middle or junior high school agricultural education programs?

14. What are the disadvantages to students who enroll in your state's middle or junior high school agricultural education programs?

15. What are the major state benefits/outcomes of your middle or junior high school agricultural education programs?

16. What are the disadvantages to states who enroll middle or junior high school students in agricultural education programs?

17. In your opinion, does middle or junior high school membership in the FFA help to increase membership in the high school FFA?
____ Yes ____ No

Please explain.

**QUESTIONNAIRE FOR MIDDLE OR JUNIOR HIGH SCHOOL
TEACHERS OF AGRICULTURAL EDUCATION**

Instructions -

The purpose of this study is to investigate factors related to middle and junior high school (6th, 7th and 8th grade) enrollment in agricultural education and membership in the FFA. Since states define middle and junior high school students differently, please report data by each grade level. Include data of funded as well as non-funded programs. Think of agricultural education programs as including those as short as 6 weeks or as long as a full year.

Name of School _____

Name of Teacher(s) _____

School Address _____

(City) (State) (Zip code)

School Telephone Number (____)_____.

- Please indicate your school's 1989-90 enrollment in agricultural education, length of program and membership in the FFA for each of the following grade levels. If you did not have any student enrollment/membership at a particular grade level, please place a N/A in the space provided.

Grade	Agricultural Education		FFA
	No. of Students	Length of Program (Weeks)	No. of Students
6th	_____	_____	_____
7th	_____	_____	_____
8th	_____	_____	_____
Total	_____	_____	_____

2. How is your middle or junior high school FFA chapter organized? (Check all that apply)

- No middle or junior high school FFA chapter
- Separate chapter for each middle or junior high school grade
- Separate chapter from high school FFA
- Joint chapter with high school FFA
- Other _____
(Please specify)

3. Do you require FFA dues for middle or junior high school members?

Yes No

If No, go to Question 4

If Yes, how much are your middle or junior high school dues?

\$ _____ Local
 \$ _____ State
 \$ _____ Other
 \$ _____ Total

4. In what year did you first begin enrolling students in agricultural education and accepting membership in the FFA at each of the following grades?

Grade	Agricultural Education	FFA
6th	_____	_____
7th	_____	_____
8th	_____	_____

5. Do you have a core curriculum (common information for all students) for your middle or junior high school agricultural education programs? Yes No

If No, go to question 6

If **Yes**, please attach a copy of the course outline and check any of the following topics that are included:

- | | |
|--|---|
| <input type="checkbox"/> Agricultural literacy | <input type="checkbox"/> Human relations |
| <input type="checkbox"/> Agricultural mechanics | <input type="checkbox"/> Agricultural marketing |
| <input type="checkbox"/> Animal science | <input type="checkbox"/> Ecology |
| <input type="checkbox"/> Plant science | <input type="checkbox"/> Conservation |
| <input type="checkbox"/> Employability skills | <input type="checkbox"/> Using microcomputers |
| <input type="checkbox"/> Soil science | <input type="checkbox"/> Supervised agricultural experience |
| <input type="checkbox"/> Career exploration | <input type="checkbox"/> International agriculture |
| <input type="checkbox"/> History of FFA | <input type="checkbox"/> Leadership |
| <input type="checkbox"/> Role of FFA | <input type="checkbox"/> Writing |
| <input type="checkbox"/> FFA meeting procedures | <input type="checkbox"/> Mathematics |
| <input type="checkbox"/> Parliamentary procedure | <input type="checkbox"/> Social skills |
| <input type="checkbox"/> Public speaking | |

6. Please indicate for the following grade levels, whether enrollment is required or elective?

<u>Grade</u>	<u>Required</u>	<u>or</u>	<u>Elective</u>
6th	<input type="checkbox"/>		<input type="checkbox"/>
7th	<input type="checkbox"/>		<input type="checkbox"/>
8th	<input type="checkbox"/>		<input type="checkbox"/>

7. Do you provide local competition for middle or junior high school FFA members? Yes No

If **No**, go to question 8

a. If **Yes**, indicate how this middle or junior high school competition is held and the grade levels for this competition. (Check all that apply).

- In conjunction with high school FFA events
- Separate from high school FFA events
- Within your own school
- Between schools (County, Area or District level)
- Between schools (State level)
- Other _____
(Please specify)

b. Grade levels included:

6th 7th 8th

c. List the specific local level competitions held for middle or junior high school students.

8. What are your suggestions regarding potential national FFA competition/events for middle or junior high school students?
9. What are the major encouragers of middle or junior high school enrollment in your agricultural education program?
10. What are the major barriers to student enrollment in your middle or junior high school agricultural education program?
11. What are the major student benefits/outcomes of your middle or junior high school agricultural education program?
12. What are the disadvantages to students who enroll in your middle or junior high school agricultural education program?

13. What are the major school benefits/outcomes of your middle or junior high school agricultural education program?
14. What are the disadvantages to schools who enroll middle or junior high school students in agricultural education programs?
15. What is/are the critical component(s) (e.g., teacher characteristics, student attitudes, parental support, SAE, facilities) of a successful middle or junior high school agricultural education program?
16. What is/are the critical component(s) (e.g., teacher characteristics, student attitudes, parental support, SAE, facilities) of a successful middle or junior high school FFA program?
17. In your opinion, does middle or junior high school membership in the FFA help to increase membership in the high school FFA?

_____ Yes _____ No

Please explain.

**QUESTIONNAIRE FOR MIDDLE AND JUNIOR HIGH SCHOOL
STUDENTS OF AGRICULTURAL EDUCATION**

Purpose

This information is needed for a research study being conducted by The Ohio State University for the National FFA Organization. By carefully filling out this questionnaire you will provide valuable information that will help agricultural education (vocational agriculture) teachers.

Directions

Answer each question as accurately as you can. Many questions can be answered by circling the number of your answer that best describes your situation. Some questions will require a written response. If you do not understand a question, your teacher will help you. All answers are completely private.

1. What is the name of your home school? _____
2. In what state is your school located? _____
3. In what grade of school are you currently enrolled?
 1. 6th
 2. 7th
 3. 8th
4. What is your sex?
 1. Female
 2. Male
5. What is your race?
 1. Asian
 2. Black
 3. Hispanic
 4. Native American (Indian)
 5. White (Caucasian)
 6. Other _____

Please list

6. Where do you live?
 1. On a farm.
 2. In the country or in a small town, but not on a farm.
 3. In a large city

7. Do you plan to enroll in agriculture classes in high school?
 1. Undecided - If undecided, go to Question 11.
 2. Yes - If Yes, go to Question 9.
 3. No - If No, go to Question 8.

8. Why do you not plan to enroll in agriculture classes in high school?

9. Do you plan to be a member of the FFA in high school?
 1. Undecided - If undecided, go to Question 11.
 2. Yes - If Yes, go to Question 11.
 3. No - If No, go to Question 10.

10. Why do you not plan to become a member of the FFA in high school?

11. Often, people influence our decisions. Listed below are people with whom you may have discussed your decision to enroll in agriculture classes. Please put a check mark (✓) indicating how each person influenced your decision.

	Discouraged me	Neither discouraged nor encouraged me	Encouraged me	Did not talk with me on this decision
a. My friend(s)	_____	_____	_____	_____
b. My father/male guardian	_____	_____	_____	_____
c. My mother/female guardian	_____	_____	_____	_____
d. My brother(s)/sister(s)	_____	_____	_____	_____
e. Relative(s) other than parent(s)/guardian(s) or brother(s)/sister(s)	_____	_____	_____	_____
f. My school guidance counselor	_____	_____	_____	_____
g. My agriculture teacher	_____	_____	_____	_____
h. My teacher(s) (other than agriculture)	_____	_____	_____	_____

12. Is the agriculture class that you are taking required or not required?

1. Required, Go to question 14.
2. Not required, Go to question 13.

13. Think back to when you decided what classes to take in middle or junior high school. What were your reasons for enrolling in this agriculture class?

14. What do you like best about your agriculture class?
15. What do you like best about your agriculture teacher?
16. What do you like least about your agriculture class?
17. What do you like least about your agriculture teacher?
18. Are you a member of the FFA?
1. Yes - if **Yes**, How many years? ____ yrs.
Go to Question 19.
 2. No - if **No**, this completes the questionnaire.
19. What do you like best about being a member of the FFA?
20. What do you like least about being a member of the FFA?