

A Status Report on Middle Grade Agricultural Education and FFA Programs in the United States

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A recommendation from Understanding Agriculture (1988) states that, "Beginning in kindergarten and continuing through twelfth grade, all students should receive some systematic instruction about agriculture" (p. 2). The intent of this recommendation was to aid our society in becoming more literate about agriculture. Agricultural literacy suggests that a person understands the food and fiber system, including its history and current economic, social, and environmental significance.

In recent years, much attention has turned toward agricultural education programs at the middle school level. The mechanism for teaching about agriculture needs further development in the field of agricultural education. Phipps and Osborne (1985) reported that over 22 percent of all secondary agriculture instructors were teaching one or more junior high or middle school courses in agriculture.

Together with a need to increase the agricultural literacy of the youth of America and the continued decline of enrollment in secondary programs of agriculture, research was needed to determine baseline data on the extent of middle school programs offered in the United States. Many believed that middle school programs would serve as feeder programs to the high schools.

Herren and Denham (1990) believed that a properly conducted middle school program could be an asset in recruiting students to the secondary program. Doese and Miller (1988) concluded that the majority of eight grade students were not planning to enroll in agricultural education their freshman year. Hedrich (1985) believed that the first step to exposing more students to agricultural education was to teach an exploratory course for seventh and eighth grade students before they reach their freshman year.

The enrollment and membership data for secondary agricultural education and FFA programs indicated a steady decline between 1977 and 1991. In 1976-77, FFA membership was 509,735 and it had dropped to 383,450 by 1991, a decline of 24.8 percent. In 1991, there were 533,959 students enrolled in secondary agricultural education programs, with only 7.18 percent of the students enrolled as members of the FFA. A turn around in membership occurred in 1991-92. At this time there were 401,574 members, and in 1992-93 there were 417,462 members (B. Slack, personal communication, October 15, 1993). In 1988, a constitutional amendment was passed at the National FFA Convention that officially allowed middle school aged youth membership into the organization.

Purpose and Objectives

This study is a component of a larger study funded by the National FFA Organization in order to determine the current status of middle grade agricultural education and FFA programs in the United States. Middle grade programs were defined as those in the sixth, seventh, and eighth grades. Specifically the objectives were to:

Establish national baseline information regarding middle grade enrollment in agricultural education and membership in the National FFA Organization.

Determine when middle grade agricultural education and FFA programs began in the United States.

Determine topics selected in state core curricula for middle grade agricultural education programs.

Describe the nature of student competition for middle grade FFA programs.

Describe the organizational pattern, funding sources and dues structure of middle grade FFA programs.

Investigate major encouragers and barriers to students enrolled in middle grade agricultural education programs.

Investigate major student benefits, outcomes and disadvantages of middle grade agricultural education programs.

Investigate major state benefits, outcomes and disadvantages of middle grade agricultural education programs.

Procedures

This project was developed as descriptive survey research. This section reports information on the population, instrumentation, and data analysis.

Population

This study included a census of the FFA executive secretaries in the United States. One executive secretary from each state, Washington, DC, Puerto Rico and the Virgin Islands were surveyed.

Instrumentation

The questionnaire used in this study was designed by the researchers. A panel review of the questionnaire by selected FFA executive secretaries, staff at the National FFA organization and teacher educators was used to establish content validity. It was pilot tested with the FFA executive secretary in Ohio.

Data Analysis

All completed questionnaires were coded and data were entered into a personal computer and analyzed using the Statistical Package for the Social Sciences. Descriptive statistics were employed to describe the respondents. Frequencies and measures of central tendency were computed. For the open-ended responses, data were analyzed by summarizing the responses into categories and frequencies were determined.

Results

Enrollment Data

In the Winter of 1991, data were received from 52 FFA executive secretaries. Thirty states reported that they had middle grade agricultural education programs, enrolling a total of 52,968 students. Nineteen states reported they had FFA membership in the middle grades, enrolling a total of 17,722 students. One-third of those enrolled in agricultural education programs were members of the FFA.

New York, Virginia and Wisconsin reported enrollment in the sixth grade. Nineteen states reported enrollment in the seventh grade while 24 states reported enrollment in the eighth grade. Table 1 reports the number of students and schools in each grade level as well as the average program length.

History of Programs

The earliest reported eighth grade program was in Virginia in 1926. Seventh grade programs started in Vermont in 1930. Sixth grade programs started in Mississippi in 1974. Eighth graders were first accepted for FFA membership in Virginia in 1926. Seventh graders were first accepted in Louisiana in 1960, whereas sixth graders first began to sign up in 1974 in Mississippi.

Table 1. Enrollment in Programs by Grade Level

Grade Level	Schools with Ag. Ed	Students in Ag. Ed.	Average Program Length	Schools with FFA	Students in FFA
6th	21	924	9 wks.	15	124
7th	514	22,056	20 wks.	378	4730
8th	1012	29,988	21 wks.	853	12868
Total	1547	52,968	17 wks.	1246	17722

Core Curriculums

Fourteen states (27%) have adapted a core curriculum for middle grade agricultural education programs. Eighteen states (35%) do not have a core curriculum. Twenty states (38%) did not respond to this question because they do not have middle grade agricultural education programs in their states. Table 2 shows the ranking of the 23 selected topics that were included in the states' core curriculums. The most common topic taught in the middle grades is plant science, followed by career exploration.

Table 2. Topics Included in Core Curriculum

Topic	Frequency
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

Competitions

Seventeen states (37%) reported that they provided state level competition for middle grade FFA members. Fifteen states (29%) indicated they do not provide state level competition. Twenty states did not respond to this question because they do not have middle grade agricultural education programs.

For those states with state level competition, 14 states indicated that competition was held in conjunction with high school FFA

events. Six states reported that the competition was separate from high school FFA events.

Four states held competitions at the sixth grade level. Fourteen states held competition at the seventh grade level, whereas 17 states held competition at the eighth grade level. Table 3 shows a ranking of the specific state level competitions held at the middle grades.

Table 3. State FFA Middle School Competitions

Area of Competition	Frequency
creed	
Livestock Judging	3
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

When asked about the possibility of holding national FFA competitions for middle grade students, 14 state FFA executive secretaries believed there should not be national competitions. Seven state FFA executive secretaries were in favor of national competitions. They suggested the following types of national contests be considered: quiz bowl, essay contests, creed speaking, and tool and material identification.

Organization and Funding Structures

Twelve states indicated that the middle grade FFA chapter was organized separately from the high school. Twenty-four states said the chapter was a joint chapter with the high school.

Twenty-seven states charge FFA membership dues. The range was from \$.50 to \$8.00. The average was \$3.98.

Seven states indicated that they used federal funds to finance agricultural education in the middle grades. Fourteen states used state funds, whereas 31 states used local funds.

Twelve states indicated that they used agricultural education funds to finance middle grade programs, while 10 states said they used

secondary education funds. Four states used foundation funds.

Encouragers of Enrollment

On an open-ended question, the FFA executive secretaries were asked to write in the major encouragers of middle school agricultural education enrollment. Six state FFA executive secretaries reported that the agricultural education instructor was the most encouraging factor. Other encouragers included FFA activities such as district and state competitions and livestock exhibits in junior shows. The program itself with its hands-on experiences was also cited as an encourager. Several people were cited as being encouragers, including: school and agricultural education program administrators, counselors, parents, brothers, sisters, FFA advisors, current and former students and selected teachers.

Barriers to Student Enrollment

On another open-ended question, FFA executive secretaries reported the major barriers to student enrollment in middle school agricultural education programs. Twenty states cited the school system and policies as barriers. Examples included 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.

Another category of barriers cited was scheduling, with nine states reporting this as a limiting factor. Others indicated that administrators', counselors' and parents' perceptions about agriculture are barriers.

Major Students' Benefits/Outcomes

An open-ended question revealed that the major student benefit of middle grade agricultural education programs was agricultural literacy. Others felt that these programs increased enrollment in secondary schools.

When asked whether or not middle school membership in the FFA helped to increase membership in the high school FFA, 25 FFA executive secretaries said yes, whereas three said no. Many wrote in their opinion explaining why

they felt that students would continue in agricultural education programs in high school. Many felt that students would be more informed and have more exposure to programs. Interest could be stimulated at a younger age.

Many felt that participation in FFA activities is another benefit. Some said that leadership development training was a benefit. Others cited that career awareness was a benefit of these programs.

Major Student Disadvantages

FFA executive secretaries were asked, "What are the disadvantages to students who enroll in your middle or junior high school agricultural education program?" The most frequent response to the question was "There are no disadvantages."

Other respondents felt that student burn out was a disadvantage. Other disadvantages cited included: lack of interest, a lack of good curriculum, lack of teacher preparation and duplication of course work in high school.

Disadvantages to States

FFA executive secretaries indicated that there were few disadvantages to states that enroll students in middle grade agricultural education programs. Eleven secretaries said that there were no disadvantages. The disadvantages cited included possible FFA/agricultural education burn-out, reduced participation in upper grades, increased numbers of students per teacher, limited participation, difficulty establishing continuity and a large expenditure of money for non-vocational programs.

Conclusions and Recommendations

Nationally, enrollment in secondary agricultural education programs and membership in the National FFA Organization has been on a decline. Many have suggested that middle schools should offer exploratory agricultural education programs that would serve to be feeder programs. The National Research Council's (1988) recommendation that agricultural education should include instruction about agriculture provides a basic rationale for middle school agriculture programs.

This study found that 30 states have active agricultural education programs in middle schools. There is a population of 52,968 students currently enrolled in sixth, seventh and eighth grade programs. About one-third of these students were members of the National FFA Organization.

Most state FFA executive secretaries indicated that middle school programs were beneficial to the students as well as to the states. Students were more aware about agriculture and more informed about careers in agriculture. The students benefited from the hands-on experiences in the classrooms. Many stated that these programs were a boost to secondary school enrollment.

Few disadvantages to states or to students were cited. However, some disadvantages of middle school programs included a potential for student burnout and an increased number of students for teachers.

FFA executive secretaries for the most part, were not in favor of competitions at the national level. They did report state level competitions in the areas of a creed contest, livestock judging and public speaking. Many states held their contests in conjunction with the high school FFA events.

The following recommendations are presented for those involved in agricultural education programming decisions at the national level.

Since the FFA is an intracurricular activity, the National Organization, the U.S. Department of Education, and the U.S. Department of Agriculture should encourage development of a middle school 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.

Designers of agricultural education and FFA programs for the middle school programs should ensure that the programs are distinct from senior high school programs.

The National FFA Organization should not develop national competitive events for middle and junior high school students at this time.

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