

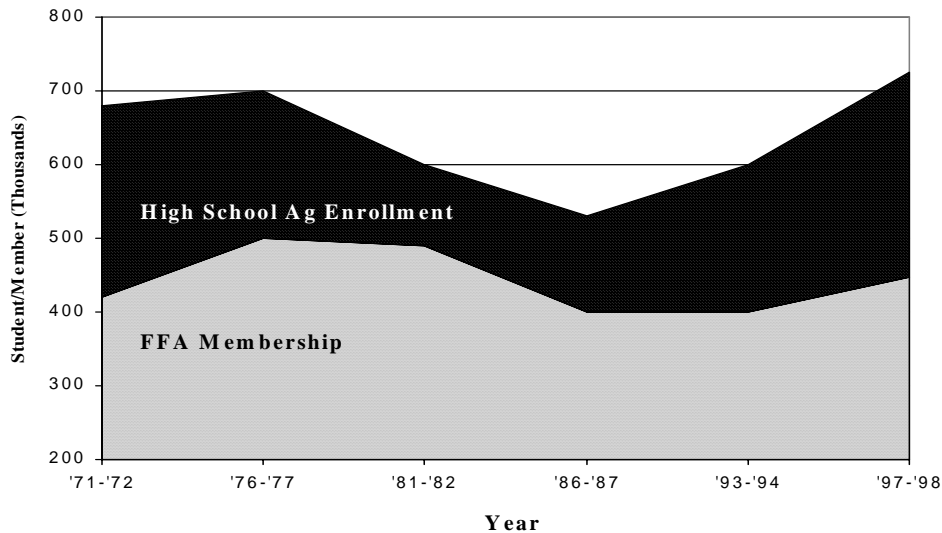
## FFA STATUS OF SELECTED AGRICULTURAL EDUCATION ENROLLEES IN OKLAHOMA

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### Abstract

**Scope and Method of Study:** The purpose of this study was to describe traditional and non-traditional Agricultural Education enrollees and the degree to which these groups participate in the Agricultural Education program. Participants in the study included 393 junior and senior schools agricultural education enrollees at selected secondary high schools in Oklahoma. Selected schools contained multiple teachers with horticulture or natural resources being taught. Non-traditional enrollees were defined as those students who enrolled in an Agricultural Education course for the first time as a junior or senior while traditional enrollees were those students who had previous years in Agricultural Education. Students completed a questionnaire regarding demographic information, FFA activities and supervised agricultural experienced programs. Descriptive statistics and T-tests were utilized to describe and compare groups. **Findings and Conclusions:** Demographically, traditional enrollees tended to be male and from rural areas while non-traditional enrollees were either male or female and from urban areas. Differences were seen in FFA activity involvement as more than 35% of traditional enrollees were involved in 8-15 activities while more than 50% of non-traditional enrollees were involved in no FFA activities. Traditional enrollees with higher grade point averages were more likely to be involved in a greater number of FFA activities. This was not true for non-traditional enrollees. Majorities of both groups were found not to have supervised agricultural experience programs or record books. Point of enrollment was found to be a factor in students level of involvement in FFA and SAE activities.

### Introduction



While expanded course offerings in areas like Horticulture and Natural Resources have increased Agricultural Education enrollments in the 1990s, student organization membership in the FFA has continued to decrease (National FFA Organization, 1999). Likewise, supervised agricultural experiences continue to decrease. A recent study by the National FFA Organization estimated that roughly half of students enrolled in Agricultural Education courses maintain an SAE or claim membership in the FFA (National FFA Organization, 1999). Figure 1 depicts the upward trends in enrollment with decreases in percentage of FFA membership.

**Figure 1.**  
**Trends in Agricultural Education enrollment and FFA membership.**

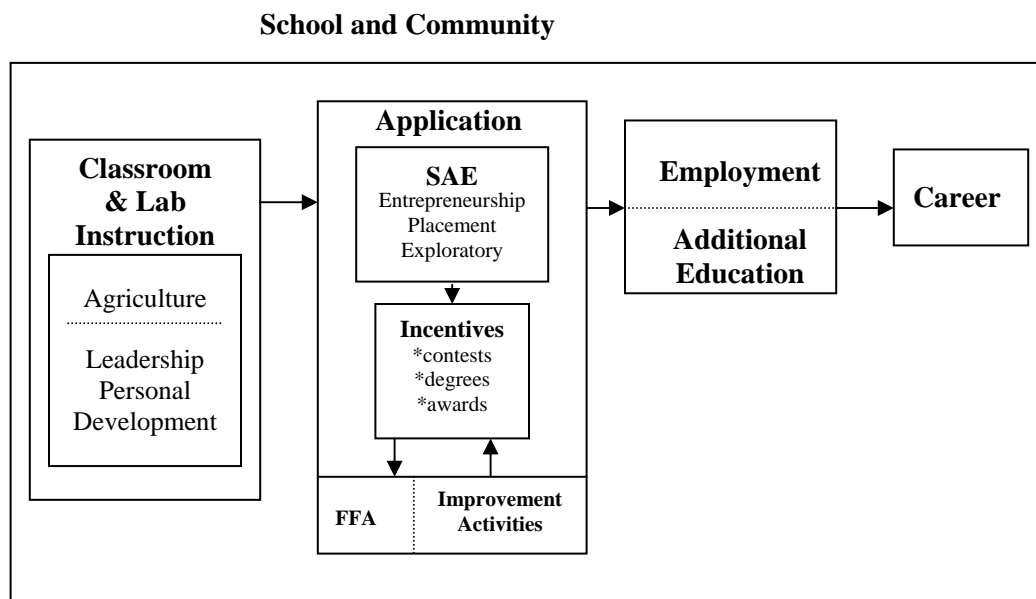
Secondary Agricultural Education programs in the United States were originally directed to educate young men who aspired to be farmers. Students entered as freshmen and completed Vocational Agriculture I-IV where they were exposed to the gamut of farming principles, techniques, and related skills. Today, Agricultural Education courses are designed for young women and men who aspire to the broad career areas found in agriculture (National Research Council, 1988).

With current course offerings varying from Animal Science to Floral Design, the Agricultural Education enrollees come with new perspectives (Hoover & Scanlon, 1991). Fewer students now complete four years of agricultural training as they were in the past (Marshall, Herring, & Briers, 1992). Many now enter as juniors or seniors and seek courses that match their specific interests. With this flexible entrance to the program comes new obstacles for Agricultural Education as teachers struggle to reach new groups of students who come to their programs with vastly different expectations (Marshall, Herring, & Briers, 1992). The influx of more non-traditional students into Agricultural Education programs may result in students who enroll for specific courses, but are not interested in FFA or SAE activities.

### Theoretical Framework

The national report, *Understanding Agriculture: New Directions for Education* (National Research Council, 1988) continues to shape the future of Agricultural Education. By determining that education in agriculture and about agriculture were important to the future of the agricultural industry, agricultural literacy efforts began through schools and state governments. Additionally, recommendations included expanding the FFA to reflect more diverse populations of students, broadening agricultural emphasis from the terms “farming” and “farmer”, and expanding Supervised Agricultural Experiences to include projects unrelated to production enterprises.

Figure 2 depicts the latest model for Agricultural Education, developed by The Council (National FFA Organization, 1992). Classroom and laboratory instruction in agriculture is reinforced through application of skills and competencies learned in the classroom through SAE, FFA activities, and improvement projects. Incentives for increased participation occur through contests, awards and degrees. These applied skills lead to employment or additional education for the student who ultimately prepares for a career. All areas are applied within the context of the school and community.



**Figure 2.**  
**The Agricultural Education model.**

Moore explained the application element of the model, SAEs, as a way to help students gain experience rather than only learning theory (National FFA Organization, 1999). To fulfill the occupational and experiential needs of students, several types of SAEs are available and outlined in the National FFA Organization Manual each year (Cheek, 1994). Currently, three types of SAEs are available: entrepreneur, placement, and exploratory. These allow students to own projects or businesses, work in agri-business, or explore various areas of interest.

Supporters of SAE’s suggest that these activities may improve student achievement though some obstacles exist. Long and Israelsen (1983) found a strong relationship between teacher emphasis and student achievement. Osborne (1988) also identified several obstacles to conducting quality SAE programs. These included: lack of student motivation, limited student opportunities, lack of teacher time, poor student record keeping practices, inadequate financial resources and facilities, and low parent interest. Dyer and Osborne (1996) concluded that SAE programs lacked definition, focus, and direction. The authors suggested that though new curricula have emerged, SAE programs have changed little.

Additionally, the FFA component of the Agricultural Education Model extends learning beyond the classroom, providing its members opportunities to further improve agricultural skills and develop agricultural leadership, cooperation, and citizenship (Townsend and Carter, 1983). Perhaps it is the development of these leadership skills that sets FFA apart as the most beneficial component of the program (Wingenbach & Kahler, 1997). Furthermore, several studies have concluded that the leadership competencies developed through FFA are beneficial to students (Carter & Townsend, 1983; Cheek, 1994), finding that individuals who participated more in FFA activities had more contacts with others and as a result broadened their frame of reference for comparison of their own self-perceived personal development.

Though the benefits of student involvement in SAE's and FFA activities appears to be positive, a National FFA study (1999) indicated that over half of all Agricultural Education enrollees are not FFA members while an even larger percentage do not have SAE's. One possible reason for the surge in enrollment and declines in FFA and SAE activities may be due to influxes of non-traditional students who enroll for the diversified courses now offered in Agricultural Education programs (Marshall, Herring, & Briers, 1992). Similar findings were evident in a study by Sproles (1987) where females completing traditionally male vocational programs were studied. Frazee and Briers (1987) found that "completers," those students completing a sequence of Agricultural Education courses, tended to enter occupations at a significantly higher rate when participating in a balanced program of FFA and SAE activities.

### **Purpose/Objectives**

The purpose of this study was to describe traditional and non-traditional Agricultural Education enrollees and the degree to which these groups participate in the Agricultural Education program. To accomplish this purpose, the following objectives were developed:

1. Compare selected characteristics of traditional and non-traditional Agricultural Education enrollees.
2. Compare traditional and non-traditional enrollees' participation in SAE activities.
3. Compare traditional and non-traditional enrollees' participation in FFA activities.

### **Methods/Procedures**

The population consisted of junior and senior students enrolled in selected Agricultural Education programs in the Spring of 1999 in Oklahoma. A school profile was developed in order to select Agricultural Education departments in Oklahoma to participate in the study. The profile included schools with multiple teachers in the department and a non-traditional area (Horticulture or Natural Resources) being taught. This list was narrowed based on the likelihood of obtaining students enrolling in Agricultural Education for the first time as a junior or senior. The researcher was assisted by the staff in the Agricultural Education Division at the Oklahoma Department of Vocational and Technical Education and Agricultural Education Faculty at Oklahoma State University in determining multiple teacher departments which fit the profile. This resulted in the selection of eight schools.

The researcher developed a questionnaire to achieve the objectives of the study. After the instrument was formulated, additions, deletions and corrections were solicited from the Agricultural Education faculty at Oklahoma State University and the supervisory staff at the Oklahoma Department of Vocational and Technical Education. Suggested changes were made and the instrument was prepared for field-testing. Additionally, state supervisory staff suggested personal visits would provide more realistic data.

A pilot study was conducted in a local school, not part of the study population. Modifications concerning instructions were made based on the results of the pilot study. Initially, each selected school was contacted by a letter from Dr. Eddie Smith, the state program leader for the Agricultural Education Division of the Oklahoma Department of Vocational Technical Education, stating the purpose, importance, and procedure of the study. A follow up phone call was made to a teacher at each school to inquire concerning their willingness to participate.

Once confirmation was made and questions concerning procedures were answered, schools were visited by the researcher or an assistant. Each junior and senior in Agricultural Education classes that day was asked to complete the instrument after being read a disclosure statement. Questionnaires were collected and returned by the researcher or assistant visiting each school. All schools were visited in the month of April, 1999.

Collected data were first separated by school. School data were then separated into two groups: 1) those taking an Agricultural Education class for the first time as a junior or senior and 2) those who were previously enrolled in Agricultural Education. Throughout the remainder of this study, those juniors and seniors taking their first Agricultural Education course as a junior or senior will be referred to as "non-traditional" and those juniors and seniors who had previous years of Agricultural Education will be referred to as "traditional."

Descriptive statistics, correlations, and t-tests were used to accomplish the analysis of the data (Pedhazur, 1982). The demographic portions of the instrument dealt with nominal data so frequencies and percentages were utilized. T-tests between traditional and non-traditional groups were used to determine if differences were statistically significant. An alpha level of .01 was selected as the significance level. Correlations were evaluated based on level of significance and strength of the relationship.

## Results/Findings

Eight schools were found to fit the established school profile, being a multi-teacher department while teaching an expanded course offering of Horticulture or Natural Resources and being likely to have juniors and/or seniors as first time enrollees. This provided 393 useable questionnaires with 190 traditional and 203 non-traditional students. 15 questionnaires were determined not to be useable because an entire category of information or more was missing.

### Comparison of Selected Characteristics

Differences were present in the gender of traditional and non-traditional enrollees. With slightly more than one-third of the traditional enrollees, and one-half of the non-traditional enrollees being female.

Place of residence for traditional and non-traditional enrollees did differ significantly ( $P(t)=.00000$ ) with a larger percentage of non-traditional enrollees (60.10%) living in the city compared to 40.53% for traditional enrollees. Fewer than 10 percent of non-traditional enrollees lived on farms compared to 25.26% of the traditional enrollees. However, plans after graduation did not differ significantly for traditional and non-traditional enrollees.

Career intentions related to an agricultural career differed for traditional and non-traditional enrollees. Of the traditional enrollees, 40.00% reported career intentions related to agriculture compared to only 16.26% for non-traditional enrollees; only 25.26% of traditional enrollees reported career intentions other than agriculture while non-traditional enrollees reported 56.16%.

Differences between traditional and non-traditional enrollees' academic performance were not seen (Table 1). Those slight differences present were not statistically significant at  $\alpha=.01$ .

Table 1.  
Academic Performance of Traditional and Non-Traditional Enrollees

Grade	Traditional		Non-Traditional	
	N	%	N	%
A's	15	7.89	33	16.26
A's & B's	83	43.68	101	49.75
B's	19	10.00	4	1.97
B's & C's	54	28.42	39	19.21
C's	8	4.21	11	5.42
C's & D's	7	3.68	12	5.91
D's or Below	2	1.05	2	.99
Overall Academic Index		3.04		3.15

$P(t)=0.108$

With regard to activities, traditional and non-traditional enrollees were very similar (Table 2). No statistically significant difference was found in the number of activities traditional and non-traditional enrollees were involved.

Table 2.  
Academic Performance of Traditional and Non-Traditional Enrollees

Activity	Traditional		Non-Traditional	
	N	%	N	%
FFA	182	95.79	133	65.52
Athletics	87	45.79	109	53.69
Honor Society	33	16.84	56	27.59
Church Group	49	25.79	70	34.48
Band	29	15.26	43	21.18
Vocational Club	34	17.89	32	15.76
Student Council	25	13.16	38	18.72
Language Club	18	9.47	44	21.67
FHA	21	11.05	32	15.76
4-H	32	16.84	3	1.48
Debate	12	6.32	26	12.81
Newspaper	11	5.79	26	12.81
Cheerleading	8	4.21	18	8.87
Hobby Club	8	4.21	14	6.90
Boy/Girl Scouts	17	8.95	9	4.43
Other Club/Organization	30	15.79	21	10.34
Mean # of Organizations	3.14		3.32	

$P(t)=0.355$

With regard to correlated variables (Table 3), differences were found in the strength of the correlation between Academic Performance and Organization Involvement as this relationship appeared to be stronger for non-traditional enrollees ( $r=.47$ ).

Table 3.  
Correlations Between Academic Performance and Organization Involvement for Traditional and Non-Traditional Enrollees

Variable	Traditional Correlation	Non-Traditional Correlation
Academic Performance/Organization Involvement	.32*	.47*

\*Significant  $r$  at  $\alpha=.01$

Few differences were found in the Agricultural Education course enrollment of traditional and non-traditional enrollees. However, a larger proportion, 66.10%, of non-traditional enrollees took Horticulture as compared to 31.05% of traditional enrollees. A greater percentage (8.95%) of traditional enrollees were enrolled in multiple courses concurrently, compared to only 2.46% of non-traditional enrollees.

### **Participation in FFA Activities**

Responses to a statement regarding FFA membership revealed differences between traditional and non-traditional enrollees (Table 4). Though the majority of both groups were members, a disparate number of non-traditional enrollees were not members (31.03%).

Table 4.  
FFA Membership of Traditional and Non-Traditional Enrollees

Membership	Traditional		Non-Traditional	
	N	%	N	%
Member	169	88.94	128	63.05
Not a Member	13	6.84	63	31.03
Unsure	2	1.05	7	3.45
No Response	6	3.16	5	2.46

Table 5 displays the frequency and percentage of FFA activities traditional and non-traditional enrollees were involved. Overall, a greater percentage of traditional enrollees were involved in all activities as compared to non-traditional enrollees. It should also be noted that “FFA Livestock Shows and Fairs” ranked second in participation for traditional enrollees while less than ten percent of non-traditional enrollees participated in this activity. Additionally, the activity most participated in by both groups, “FFA Fundraising,” was also disparate with 71.05% of traditional and 31.53% on non-traditional enrollees participating.

Table 5.  
FFA Activities of Traditional and Non-Traditional Enrollees

Activity	Traditional		Non-Traditional	
	N	%	N	%
FFA Fundraising	135	71.05	64	31.53
FFA Field Trip	116	61.05	50	24.63
FFA Chapter Banquet	119	62.63	28	13.79
FFA Judging Contests	87	45.79	26	12.81
FFA Community Activities	95	50.00	23	11.33
FFA Committee Member	69	36.32	19	9.36
FFA Livestock Shows/Fairs	124	65.26	19	9.36
State FFA Convention	75	39.47	10	4.93
National FFA Convention	52	27.37	4	1.97
Made For Excellence Conference	30	15.70	4	1.97
FFA Alumni Camp	40	21.05	3	1.47
FFA Award Applications	72	37.89	3	1.47
FFA Chapter Officer	44	23.16	2	.99
FFA Leadership/Speaking Contests	52	27.37	2	.99
FFA Committee Chairperson	41	21.58	0	.00

Additional differences were seen in FFA Status (Table 6). The number of FFA activities traditional and non-traditional enrollees participated differed greatly with 14.21% of traditional and 51.23% of non-traditional enrollees involved in no activities. Also, 35.26% of traditional and .99% of non-traditional enrollees were involved at the Committed level.

Table 6.  
FFA Status of Traditional and Non-Traditional Enrollees

Activity	Level	Traditional		Non-Traditional	
		N	%	N	%
None	(0)	27	14.21	104	51.23
Limited	(1-3)	40	21.05	73	35.96
Active	(4-7)	56	29.47	24	11.82
Committed	(8-15)	67	35.26	2	.99

### **Participation in SAE Activities**

With regard to SAE Status, differences were again visible. Those enrollees reporting an SAE and record book were much higher for traditional (42.63%) than non-traditional (3.94%) enrollees. A much larger percentage of non-traditional enrollees (31.53%) reported an SAE but no record book as compared to traditional enrollees (10.00%). A large proportion of both traditional and non-traditional enrollees did not have an SAE with 47.37% of traditional and 64.53% of non-traditional.

Differences were also found in the types of SAEs of traditional and non-traditional enrollees (Table 7). Most (42.63%) traditional enrollees reported production SAEs (owning livestock, producing crops, etc.) while most (26.60%) non-traditional enrollees reported unpaid placement SAEs (having a plant to care for in the greenhouse). For both groups, the majority reported no SAE.

Table 7.  
Types of SAEs of Traditional and Non-Traditional Enrollees

Type of SAE	Traditional		Non-Traditional	
	N	%	N	%
Production	81	42.63	7	3.45
Agribusiness	6	3.16	1	.49
Paid Placement	9	4.74	3	1.48
Unpaid Placement	4	2.11	54	26.60
None	90	47.37	131	64.53

Table 8 displays the relationship between SAE and FFA Status which was stronger for traditional enrollees ( $r=.61$ ). A more prominent difference was seen in the relationship between Academic Performance and FFA Status as a statistically significant relationship existed for traditional enrollees that was not seen for non-traditional enrollees, though the practical difference was minimal.

Table 8.  
Correlations Between Selected Variables for Traditional and Non-Traditional Enrollees

Variables	Traditional Correlation	Non-Traditional Correlation
SAE/FFA Status	.61*	.25*
Academic Performance/FFA Status	.24*	.16

\*Significant  $r$  at  $\alpha=.01$

### **Conclusions/Recommendations/Implications**

Based on the findings of this study the following conclusions were made:

Demographic characteristics of traditional and non-traditional were similar except in the areas of gender and place of residence. This finding concurred with previous research classifying both females and those from urban areas (Sproles, 1987) as non-traditional enrollees. For practical purposes, traditional and non-traditional enrollees were not different.

Traditional enrollees with higher academic performances were more likely to be involved in a greater number of FFA activities. This finding was not true for non-traditional enrollees indicating that point of entry, regardless of academic performance, was a factor in student involvement in activities.

Non-traditional enrollees were not members of FFA nor were they involved in FFA activities. Late entrance was determined to be a significant factor in students' lack of involvement in FFA activities. Previous research had not specified point of entry as a factor in students' involvement in student organizations.

SAE's are not the norm for traditional and non-traditional enrollees. This concurred with previous research in other states and nation wide (National FFA Organization, 1999). Regardless of the benefits of SAEs and FFA stated in the literature (Rawls, 1982; Carter & Townsend, 1983), students continue to pass through Agricultural Education programs without having SAEs or record books or being involved in FFA.

The reaction of Agricultural Educators to lack of FFA membership and declining Supervised Agricultural Experiences is to work harder at recruiting students and mandating these activities once students are enrolled. Trends over the last thirty years have indicated continued decreases in FFA membership and SAE involvement while total Agricultural Education enrollment has surged. The knee-jerk reaction of those closely associated to Agricultural Education might be to attack the “problem” with more stringent rules, regulations, and mandates. The profession may need to begin addressing questions concerning the fundamental elements of the Agricultural Education program.

Questions include:

1. Does the current Agricultural Education Model reflect today’s Agricultural Education programs?
2. Is FFA and SAE involvement integral if only a small percentage of students participate in the full program?
3. How can pre-service Agriculture Education teachers best deal with the reality of declining FFA and SAE involvement?

The profession may be better served if the “problems” associated with Agricultural Education are viewed as “opportunities.” The wake-up call may have arrived whereby serving ALL students’ needs becomes the focus.

### References

- Cheek, J.G. (1994). Relationship of supervised agricultural experience program participation and student achievement in Agricultural Education. *Journal of Agricultural Education, 35*(2), 1-5.
- Dyer, J.E. & Osborne, E.W. (1996). Developing a model for supervised agricultural experience program quality: A synthesis of research. *Journal of Agricultural Education, 37*(2), 24-32.
- Fraze, S.D. & Briers, G.E. (1987). The relationship between participation in selected FFA activities and the career choice of program completers in vocational agriculture in Texas. *Journal of the American Association of Teacher Educators in Agriculture, 28*(1), 17-25.
- Hoover, T.S. and Scanlon, D.C. (1991). Recruitment practices—A national survey of agricultural educators. *Journal of Agricultural Education, 32*(3), 29-34.
- Long, G.A. & Israelsen, C. (1983). Relationships between student performance and organizational and program variables in Agricultural Education. *The Journal of AATEA, 24*(2), 34-39.
- Marshall, T., Herring, D., & Briers, G. (1992). Factors associated with enrollment in agricultural science and membership in the FFA in Texas. *Journal of Agricultural Education, 33*(4), 17-23.
- Osborne, E.W. (1988). SOE Programs in Illinois---teacher philosophies and program characteristics. *The Journal of AATEA, 29*(3), 35-42.
- National FFA Organization. (1992). *Experiencing Agriculture*. Alexandria, VA: National FFA Organization.
- National FFA Organization. (1999). *FFA Advisors: Making a Difference*, (7)9.
- National Research Council, Committee on Agricultural Education in Secondary Schools, Board of Agriculture. (1988). *Understanding agriculture—new directions for education*. Washington, D.C.: National Academy Press.
- Pedahazur, E.J. (1982). *Multiple regression in behavioral research*. New York: Holt, Rinehart, & Winston.
- Sproles, E.K. (1987). Perceptions by nontraditional and traditional agricultural students toward their high school preparation and work barriers. *Journal of AATEA, 28*(2), 18-24.
- Townsend, C. & Carter, R. (1983). The relationship of participation in FFA activities and leadership, citizenship, and cooperation. *Journal of AATEA, 24*(1), 20-25.
- Wingenbach, G.J. & Kahler, A.A. (1997). Self-perceived youth leadership and life skills of Iowa FFA members. *Journal of Agricultural Education, 38*(3), 18-27.