

Occupational Aspirations of State FFA Contest and Award Winners

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Agricultural educators profess that classroom and laboratory instruction, supervised occupational experience, and Future Farmers of America (FFA) activities are interrelated. Philosophically, the three components serve complementary yet different roles. An extension of this belief is that students who advance in FFA contest or award programs are progressing toward occupations in agriculture.

Such occupations, including those in other fields, are impacted by economics, technology, and numerous societal factors. Technology's impact on agriculture can be found in the FFA's Computers in Agriculture (CIA) award program. The program was instituted in 1984 to provide new occupational outlets for students and to attract academically talented, as well as nonrural students, to vocational agriculture classrooms.

Purpose and Objectives

This study was designed to explore the occupational aspirations of students who have high levels of participation in the CIA program. A secondary purpose was to compare CIA participants with students who have similar levels of participation in other FFA activities. Two objectives were prepared to guide the study:

1. To describe and compare selected demographic characteristics and FFA activities of state FFA winners of (a) CIA awards, (b) proficiency awards, and, (c) prepared and extemporaneous speaking contests.
2. To determine whether the three groups of state winners have occupational aspirations in agriculture.

Related Literature

Numerous researchers have studied vocational agriculture instruction, FFA participation, and occupational aspirations of students as separate issues. Few, however, have examined relationships between these three components of a secondary vocational agriculture program.

Herren (1987) studied 88 students named in 1984 as regional and National FFA Proficiency Award winners. He found that 62 of 78 winners responding to his survey were employed at least part-time. Herren (1987) also found that 37 were employed in their award area. The respondents listed their parents as individuals most responsible for them doing a good job with their supervised occupational experience program. Their vocational agriculture teacher was second most influential. Herren (1987) also found that 44 of the 78 winners were enrolled in college.

McGary (1986) found that 90% of the 1982-1985 National FFA Proficiency Award finalists were males. She also found that 95% planned careers in their award area. Most aspired to careers in agribusiness and planned to diversify their occupational preparation (McGary, 1986).

Odell (1986) found that high ability rural 10th and 12th grade students tended to plan for college and aspire to occupations having higher status than positions aspired to by noncollege bound students. Odell (1986) concluded that occupations these students expected to hold had higher status than occupations their parents held.

Menanteau-Horta (1984) found that male students from both rural and urban locations were more than twice as likely as female students to aspire to science-related jobs. Further, students living in urban areas aspired to professional occupations while rural students tended to aspire to nonprofessional occupations. "Students aspiring to science-related jobs are more likely to be from the metro area, attend large schools, have fathers who are professionals, have superior grades, and receive strong encouragement and support at home" (Menanteau-Horta, 1984, p. 4).

Gamble (1986) studied 1979-1981 participants in National FFA contests. He concluded that the major benefit students derived from the contests involved interpersonal skills, i.e., self-confidence/self-esteem. Gamble wrote, "If the purpose of the vocational agriculture program is to prepare students for employment, then the students participating at the national level do not reflect that mission" (1986, p. 307).

Gartin, Knight, and Warmbrod (1985) studied the current occupational status of 1968-1977 Colorado American Farmer degree recipients. They found no relationship between occupational status and scores obtained on the educational and occupational experiences sections of the degree application. Negligible to low relationships existed between the recipient's current occupation and variables related to their vocational agriculture preparation.

Methods and Procedures

In choosing subjects for the study, the researchers felt that state winners would be highly involved in (a) the FFA, (b) supervised occupational experience activities, and (c) vocational agriculture instruction. Further, on the national level, state CIA winners are judged on written applications and demonstrations of their computer competence. Speakers are judged on live performances, and proficiency winners mainly on written applications. The researchers felt live and written aspects of the three programs would allow meaningful comparisons.

The target populations included 1984-1986 state winners of the Computers in Agriculture award, the Prepared and Extemporaneous Speaking contests, and the FFA Proficiency award program. The population included 2,950 individuals identified by the National FFA Organization. Students who were state winners in two areas were assigned at random to one of the two categories. The population was then stratified by award area before a random sample of 393 students was chosen. The sample included 91 Computers in Agriculture winners, 334 Proficiency Award winners, and 148 Prepared and Extemporaneous Speaking contest winners.

A questionnaire suitable for mailing was developed by the researchers. The questionnaire was reviewed by a panel of faculty and graduate students at The Ohio State University (OSU) to determine its content and face validity. A sample of undergraduate students at OSU was then chosen for a pilot test of the instrument. Needed revisions were made on the instrument.

The initial mailing on May 8, 1987 included a letter of endorsement from the National FFA advisor (Larry D. Case), the instrument, a parental permission form the OSU Human Subjects Committee required for students under 18, and a self-addressed, stamped envelope. The cover letter requested that the state winners return a copy of their high school transcript. A second mailing of the same materials was sent June 12, 1987 to individuals who had not responded. A separate letter requesting transcripts was sent to winners who returned instruments but not transcripts. The data collection lasted until August 31, 1987 to allow ample time to locate current addresses for all members of the sample.

At the end of the data collection period, 300 of 503 state winners had returned the instrument. Early and late respondents were compared as recommended by Miller and Smith (1983). The researchers compared the 273 May and June respondents (early) and the 27 July and August respondents (late). Analyses performed using the t-test and chi-square statistics suggested that the two groups were not significantly different ($p > .05$) in terms of their age, type of award won, occupational goals, place of residence, whether an active FFA member, highest FFA degree held, high school grade point average, class rank, and class size.

Data from the transcripts were coded according to guidelines used by The Ohio State University Office of Admissions to categorize courses as English, mathematics, science, vocational, arts, etc. The researchers used the .05 alpha level to test for significant relationships.

Findings

Demographic and FFA Characteristics Mean ages for the three groups of state winners did not differ significantly ($p < .05$). Computers in Agriculture winners were 19.1, speakers 18.9, and Proficiency winners 19.7 years old when they were named state winners, As shown in Table 1, 86.7% of CIA state winners were male compared with 79.9% of proficiency winners, and 55.4% of speakers. Significant differences were observed in the gender of the three groups of state winners (Chi square = 20.6, $df = 2$; $p < .05$). A Cramer's V of .26 indicated a low relationship between state award winner group and gender.

Three variables relative to FFA activities are also summarized in Table 1. Almost 70% of computer winners, 62% of speakers, and 77% of proficiency winners had earned State FFA degrees. Eight percent of computer winners and 12% of both proficiency and speakers winners had earned American Farmer degrees. The three groups, however, were not significantly different in terms of highest FFA degree earned.

There was a low relationship between attendance of the National FFA Convention and type of award won (Chi square = 12.4; $df = 2$; $p < .05$; Cramer's V = .21). Over 93% of speakers had attended the National Convention compared with 75% of computer winners and 73% of proficiency winners. The three groups were also significantly different in terms of holding state FFA offices. Slightly over 45% of speakers, 17% of computer winners, and 14% of proficiency winners had been state FFA officers. A Cramer's V of .31 (Chi square = 7, $df = 2$; $p < .05$) indicates a moderate relationship between type of award won and holding a state FFA office.

Place of Resident Almost two-thirds (65.8) of the state winners lived on farms and 17.6% lived in rural, nonfarm areas (See Table 2). Eight percent lived in towns with populations under 5,000. The remaining 8.4%

lived in either small or large cities. A significant difference was observed in place of residence for the three groups of state winners. Three-fourths of computer winners, two-thirds of proficiency winners, and slightly over half of the speakers lived on farms. Six percent of both the computers and proficiency winners lived in cities, as opposed to 16% of the speakers. There was a low relationship between place of residence and type of award winner (Chi square = 17.3; df = 8; $p < .05$; Cramer's $V = .17$).

Table 1
Selected Demographic and FFA Characteristics of State Winners

Variable	Computers	Speaking	Proficiency
<u>Gender</u>	(N = 65)	(N = 74)	(N = 161)
Male	56/86.2%	41/55.4%	127/79.9%
Female	9/13.8%	33/44.6%	34/21.1%
<u>Highest FFA Degree</u>	(N = 63)	(N = 74)	(N = 154)
Greenhand	1/1.6%	---	1/0.6%
Chapter Farmer	13/20.6%	19/25.7%	16/10.4%
State Farmer	44/69.8%	46/62.2%	118/76.6%
American Farmer	5/8.0%	9/12.2%	19/12.3%
<u>National Convention</u>	(N = 64)	(N = 74)	(N = 157)
Attended	48/76.2%	69/93.2%	115/73.2%
Did not attend	15/23.8%	5/6.7%	42/26.8%
<u>Was a State Officer?</u>	(N = 64)	(N = 73)	(N = 155)
Yes	11/17.2%	33/45.2%	22/14.2%
No	53/82.8%	40/54.8%	133/85.8%

Table 2
Place of Residence for State Winners

Group	Rural Farm	Rural Nonfarm	Small Town	City	Large city	Total
Computers	51 78.5%	5 7.6%	5 7.6%	1 1.5%	3 4.6%	65 22.0%
Speakers	39 52.7%	18 24.3%	5 6.8%	5 6.8%	7 9.5%	74 25.1%
Proficiency	104 66.7%	29 18.6%	14 9%	5 3.2%	4 2.6%	156 52.9%
Total	194 65.8%	52 17.6%	24 8.1%	11 3.7%	14 4.7%	295 100%

Note: Small Town = Under 5,000; City = 5,000- 30,000; Large City = Over 30,000.

Occupational Aspirations When asked who was most influential in their choosing an award area, the FFA advisor was named by most state winners. More than half of the state winners, regardless of award area, listed

their FFA advisor as most influential. Over 20% indicated that they were most responsible and slightly over 14% listed their parents. The three groups were not significantly different ($p > .05$) in terms of individuals influencing their choice of award area (see Table 3).

Almost 71% of speakers, 52% of computer winners, and 45% of proficiency winners were enrolled in 4-year colleges. As shown in Table 3, a fourth of the proficiency winners were employed full-time compared with 15% of computer winners and 7% of speakers. A low relationship (Chi square = 20.6; df = 6; $p < .05$); Cramer's $V = .19$) existed between present position and type of award winner.

Table 3
Present Status and Occupational Aspirations of FFA State Winners

Person Influencing Award	Type of State Winner		
	Computers	Speakers	Proficiency
<u>Choice of State Winners</u>	(N = 60)	(N = 69)	(N = 138)
FFA Advisor	35/58.3%	38/55.1%	73/52.3%
Parent	6/10.0%	10/14.4%	22/15.9%
Self	15/25.0%	12/17.4%	30/21.7%
Other	4/6.6%	9/13.0%	13/9.4%
<u>Present Occupation</u>	(N = 65)	(N = 73)	(N = 156)
High School	11/16.9%	12/16.4%	22/14.1%
2 year college	10/15.4%	4/5.5%	25/9.0%
4 year college	34/52.3%	52/71.2%	70/44.9%
Employed	10/15.4%	5/6.8%	39/25.0%
<u>5-year Occupational Goal</u>	(N = 60)	(N = 71)	(N = 145)
Farming	9/15.0%	1/1.4%	44/30.3%
Professional-Ag	16/26.7%	42/59.2%	48/33.1%
Nonprofessional-Ag	3/5.0%	1/1.4%	7/4.8%
Professional-Nonag	29/48.3%	24/33.8%	31/21.4%
Nonprofessional-Nonag	1/1.7%	-----	4/2.7%
Other	2/3.3%	3/4.2%	11/7.6%

In terms of their five-year occupational goals, almost 70% of the state winners aspired to professional positions. Almost 60% of speakers, 33% of proficiency winners, and 27% of computer winners aspired to professional positions in agriculture. Further, 48% of computers winners wanted professional positions not in agriculture compared with 34% of speakers and 20% of proficiency winners. As shown in Table 3, over 30% of proficiency winners desired to farm as opposed to 15% of computer winners and less than 2% of speakers. A Cramer's V of .30 indicated a moderate relationship between occupational goals and type of award winner (Chi square = 48.2; df = 10; $p < .05$).

Conclusions and Recommendations

State winners were active in FFA activities included in the study. Education beyond high school was being sought extensively by state winners, especially studies leading to 4-year degrees.

Computers in agriculture and proficiency state winners tended to be males living on farms or in rural, nonfarm areas. State winners of speaking contests tended to be a more even distribution of males and females. Speakers and computers state winners aspired to professional occupations more so than did proficiency winners. Speakers aspired to professional occupations in agriculture whereas computers winners tended to prefer professional positions not in agriculture.

The National FFA organization should assess how the Computers in Agriculture program can be more attractive to the intended clientele. Vocational agriculture teachers should explore whether students participate in the CIA program because of an interest in computer technology or because of career opportunities in agriculture.

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