

**Job Placement as Influenced by the Agricultural Background
of Vocational Agriculture Graduates**

Joseph H. Mick
*Director of Cooperative
Education and Placement*

**Mississippi County
Community College**
Blytheville, AR

Bob R. Stewart
Professor

Agricultural Education
*University of Missouri-
Columbia*

Donald M. Claycomb
Assistant Professor

Agricultural Education
*University of Missouri-
Columbia*

Vocational agriculture is the part of the curriculum of many high schools designed to provide students with knowledge and skills needed for entry into agricultural occupations. Calhoun and Finch (1976) suggested that contemporary vocational agriculture programs should focus on preparation and advancement in any occupation involving knowledge and skill in agriculture. Historically, supervised occupational experience programs (SOEPs) have been an important component of vocational agriculture programs. The SOEPs should be designed to prepare students for job placement in either farming or off-farm agricultural occupations (Binkley and Tulloch, 1981). Vocational agriculture instructors have recognized the performance of tasks by their students in a supervised agricultural environment outside the classroom as a means of providing individualized learning in agriculture (Williams, 1978). Burdine (1978) suggested that a good SOEP can help bridge the gap between school life and the world of work by blending meaningful job experiences with related educational courses. Rawls (1977) also concluded that it is important that the SOEP and other components of the vocational agriculture program be geared toward preparing students with occupational and vocational plans for entering employment after graduating from high school.

Agricultural educators have suggested that a positive relationship should exist between the agricultural background of the vocational agriculture graduate and job placement. Therefore, the lack of data to document the relationship of the agricultural background of students to job placement in Missouri became the focal point of this study

Objective of the Study

The primary objective of this study (Mick, 1983) was to identify the relationship between job placement of Missouri high school seniors graduating in 1977 who studied vocational agriculture and the following student variables: (a) type of SOEP; (b) type of agricul-

tural background prior to high school; (c) current level of education; (d) number of SOEP supervisory visits during the senior year; (e) growth of the SOEP from the freshman year to the senior year in high school; (f) change in net income from the SOEP between the freshman and the senior year in high school; and (g) scope of the SOEP the senior year in high school.

The following null hypotheses were formulated and tested at the .05 alpha level:

Ho₁: There was no relationship between the type (ownership as risk taking or placement as wage earning) of supervised occupational experience programs of vocational agriculture students and their first and fifth year job placement.

Ho₂: There was no relationship between the type of agricultural background prior to high school of vocational agriculture students and their first and fifth year job placement

Ho₃: There was no relationship between the level of education completed by the vocational agriculture students and their fifth year job placement

Ho₄: There was no relationship between the number of senior year supervisory visits to the vocational agriculture students and first and fifth year job placement.

Ho₅: There was no relationship between the growth of vocational agriculture students' supervised occupational experience program and their first and fifth year job placement.

Ho₆: There was no relationship between the amount of change in net income received from vocational agriculture students' supervised occupational experience program and their first and fifth year job placement.

Ho₇: There was no relationship between the scope of students' supervised occupational experience program and their first and fifth year job placement.

Population and Sample

The population for this study consisted of 3,500 senior students from Missouri high schools with programs of vocational agriculture in 1975 through 1982. The sample was drawn based on the 3,500 senior students who took vocational agriculture in 1977. Thirty schools were randomly selected from the 234 schools offering vocational agriculture to obtain the needed sample size of 346 students which would be representative of the population at the .05 level. Only students with completed SOEP records for both 1975 and 1977 were included in the study. The size of this sample was selected according to procedures suggested by Krejcie and Morgan (1970).

Methods

The design of the study was ex post facto in nature because it was not possible to exert direct control over the independent variables. Job placement was identified as the dependent variable. Responses were categorized as full-time agriculture, part-time agriculture, or other placement.

Data were collected from records in the Missouri Department of Elementary and Secondary Education and by a mailed questionnaire. The questionnaire was designed to collect data about the first and fifth year job placement of the graduates. The validity of the instrument was checked by a panel of experts in Agricultural Education at the University of Missouri-Columbia. In addition, a field test was conducted with graduates from a Missouri high school not selected for the study. Based on the results of the field test, the procedures and instrument were judged to be workable.

There were 350 questionnaires mailed to the vocational agriculture instructors of the selected schools with a request that they be delivered to the vocational agriculture graduates. Two-hundred-thirty questionnaires were delivered to graduates. Five graduates were found to be deceased. Seventy-eight graduates each returned a questionnaire. A mail and a telephone follow-up were made to each teacher. The 35% return rate became a limitation of the study. Therefore, a phone survey of the non-respondents was conducted to see if there was a significant relationship between the response of the respondents and non-respondents. Sixteen (10%) randomly selected graduates that had not responded were contacted by telephone and data were collected. Chi-square values of .0172 and .7163 were calculated comparing the responses given by the respondent and non-respondent groups as to their type of job placement one and five years after graduation. The data showed both groups to have similar response patterns.

The data were analyzed using chi-square tests for independence. When the expected cell sizes were small, Yates' correction for continuity was used. Null hypotheses were tested for significance at the .05 alpha level.

The data were analyzed by use of chi-square tests. Table 1 presents the results of the analysis.

Null hypothesis 1 was rejected. Significant relationships were found between the type (ownership and placement) of SOEPs of vocational agriculture students and fifth year job placement. Those graduates who had placement types of SOEPs in high school vocational agriculture were more likely to be engaged in occupations not related to agriculture.

Null hypothesis 2 was rejected. Significant relationships were found between the type of agricultural background prior to high school of vocational agriculture graduates and first and fifth year job placements. Those graduates who had farm backgrounds prior to entering high school were more likely to be engaged in full-time agri-

Table 1

Chi-Square Values by Variables for First and Fifth Year of Job Placement

Variables	First year placement		Fifth year placement	
	n	χ^2	n	χ^2
Type of SOEP	73	2.17	70	8.11*
Agricultural background	76	14.05*	73	10.57*
Level of education	--	-----	73	17.46*
Number of SOEP visits	72	1.86	69	.67
Growth of SOEP	71	3.76	69	5.47
Change in net income	71	12.25*	69	1.77
Scope of SOEP	71	3.71	69	6.950

Note: * = $p < .05$

cultural occupations. Those graduates who did not have farm backgrounds prior to entering high school were more likely to have jobs not related to agricultural education.

Null hypothesis 3 was rejected. Significant relationships were found between the level of education completed by the vocational agriculture graduates and their fifth year job placement. Those graduates who had a high school education were more likely to be engaged in full-time agricultural occupations. Those graduates who had completed other types of educational programs beyond high school (technical, community college, four year college, etc.) were more likely to be engaged in part-time agricultural occupations and in occupations not related to agriculture.

Null hypothesis 4 was not rejected, indicating no significant relationship between the number of senior year supervisory visits made by the high school vocational agriculture instructor and first and fifth year job placements of the graduates.

Null hypothesis 5 was not rejected, indicating no significant relationship between the growth of the vocational agriculture graduates' SOEP and first and fifth year job placements.

Null hypothesis 6 was rejected. Significant relationships were found between the amount of change in net income received from the vocational agriculture graduates' SOEP and their first year job placement. Those graduates who had a net income in the top third of the group were more likely to be engaged in either full-time or part-time agricultural occupations. Those graduates who had a net income in

the middle or bottom third of the group were more likely to have jobs not related to agricultural occupations.

Null hypothesis 7 was not rejected, indicating no significant relationship between the scope of the vocational agriculture graduates' SOEP and their first and fifth year job placement.

Discussion

Professionals in agricultural education must continually seek ways to improve their programs. Caution should be used in examining the findings of this study because of the relative low response rate. However, based on the similarity of responses from respondents and nonrespondents, the following implications may be suggested. Those students with ownership types of SOEPs were more likely to be engaged in full-time agricultural occupations while those who had placement types of SOEPs were more likely to be engaged in occupations not related to agriculture.

If the percentage of vocational agriculture students entering full-time agricultural employment in Missouri is to be increased, schools need to find ways, such as providing facilities and support, for more students to have ownership SOEPs or to increase the quality and relevance of placement types of SOEPs. Teachers must not write off students with small SOEPs, but should do those things that will provide all students opportunities that will increase their interest in and enhance their likelihood to enter agricultural employment.

Students who had farm backgrounds prior to entering high school were more likely to be engaged in agricultural occupations. Therefore, teachers must also find ways to better prepare and/or increase the desire of non-farm students to enter into agricultural employment. SOEPs for students with non-farm backgrounds can be a vehicle for equalizing opportunities and increasing the likelihood that these students will enter agricultural employment.

Graduates having only a high school education were more likely to be engaged in full-time agricultural occupations than were graduates completing education beyond high school. If a most favorable reflection of vocational agriculture is to be received from the agricultural community, schools must endeavor to insure that those students not planning formal education beyond high school are well equipped to enter the agricultural field. It is also important that those individuals going directly from high school into agricultural employment have an opportunity to participate in adult education programs related to their employment.

If all students are to receive the greatest benefit from studying vocational agriculture, teachers, supervisors, and teacher educators must work to improve its programming. Specifically, one challenge is to provide SOEPs developed to meet the individual needs and back-

ground of each student enrolled in vocational agriculture to aid them in developing the competencies needed for placement in an agricultural occupation.

References

- Binkley, H. R., & Tulloch, R.W. (1981). *Teaching vocational agriculture/agribusiness*. Danville, IL: The Interstate Printers and Publishers, Inc.
- Burdine, R. (1978). S.O.E. programs in agriculture - what and why. *The Agricultural Education Magazine*, 50, 271-272.
- Calhoun, C., & Finch, A. V. (1976). *Vocational and career education: Concepts and operations*. Belmont: Wadsworth.
- Krejcie, R. U., & Morgan, D. U. (1970). Determining sample size for research activities. *Educational and Psychological Measurement*, 30, 607-610.
- Mick, J. H. (1983) *Relationships between agricultural background and job placement of vocational agriculture graduates in Missouri*. Unpublished doctoral dissertation, University of Missouri-Columbia.
- Rawls, W. (1977). Supervised occupational experience. *The Agricultural Education Magazine*, 49, 152-153.
- Williams, D. L. (1978). What do students think of supervised occupational experience? *The Agricultural Education Magazine*, 50, 281-287.