

**Relationship of Length of Vocational Agriculture
Teacher Contract to Supervised Occupational
Experience Program Scope**

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Experience, especially learning by doing, is an important part of the educational process in vocational education. Experience provides relevance to the theory and cognitive material of the classroom (Dewey, 1916).

The value of providing supervised experience in vocational agriculture has been recognized since the passage of the Smith-Hughes Act in 1917. This act initiated federal support for vocational agriculture in the public schools and specifically mandated that all students engage in a minimum of six months of supervised farming. Such farming programs and related agribusiness activities often continued beyond the normal school year. Because of this, vocational agriculture teachers have been employed to utilize the opportunities for providing educational experience available during the summer period. In addition, the summer program provides an ideal time for teachers to aid established farmers and agribusiness personnel in solving agricultural problems. But in spite of the need for year-round programs, more than two-thirds of the states have vocational agriculture programs that are operating without summer programs.

In order to support a rationale for summer programs in agricultural education, data are needed relative to the relationship between length of vocational agriculture teacher contracts and the supervised occupational experience program. Several researchers have investigated summer activities of teachers in vocational agriculture (Anderson, 1964; Bradley, 1973; Cepica, 1977, 1979; Lantis, 1975; and Wineinger, 1969), but none have directly examined the relationship between summer programs and supervised occupational experience programs.

Purposes of the Study

The primary purpose of the study was to ascertain if the extent to which vocational agriculture teachers are employed on a 12-month basis is related to the scope of supervised occupational experience programs conducted by students. The following research hypothesis directed the research:

There is a positive relationship between the extent to which vocational agriculture teachers are employed on a 12-month basis and the scope of supervised occupational experience programs.

An ex post facto design was used in this study. Kerlinger (1973) identified three weaknesses of ex post facto research: (a) the inability to manipulate the independent variables; (b) the lack of power to randomize; and (c) the risk to improper interpretation. Kerlinger (1973) recommends that alternative (rival) hypotheses be stated before data are collected to control these potential weaknesses. Significant differences or correlation are located if possible and then interpreted.

Recognizing that there are many variables associated with supervised occupational experience programs, other alternative (rival) independent variables were identified through a review of literature and examined in relationship to the hypothesis. These variables were:

1. Length of teaching experience,
2. Percentage of students living in rural areas,
3. Teacher perception of release time available,
4. Teacher perception of travel money available,
5. Number of supervisory home visits per students,
6. Teacher having a part-time job,
7. Extent to which teacher had vocational agriculture in high school, and
8. Teacher assistance with fairs.

Research Procedure

Subjects Investigated

The population for the study consisted of all senior high school vocational agriculture teachers in central Florida (Region III). Because of the relatively small size of the target population (56 teachers), a census of the teachers was used for data collection. In addition to the primary census of teachers, a secondary sample comprised of each teacher's 12th grade students was utilized to gather data regarding supervised occupational experience programs (SOEP).

Instrumentation

In order to obtain the required information, two questionnaires were used in the study. The first questionnaire was designed for teachers and gathered data on the following alternative (rival) independent variables: percentage of students living in a rural area, teacher perception of release time and travel money available, teacher having a part-time job, extent to which the teacher had vocational agriculture in high school, and teacher assistance with fairs. The instrument was field tested to determine validity. Ohio vocational agriculture teachers, graduate students, and faculty members in agricultural education served as jury members.

The second questionnaire was designed to collect information from 12th grade students regarding the scope of SOEPs and the number of supervisory visits teachers made to their SOEPs. This questionnaire was adapted from a questionnaire used by Morton (1978) and was used to determine the average SOEP scope of the 12th grade students in each program.

A third source of data in the study was the Florida Agribusiness and Natural Resources Educational Personnel Data and Class Schedule Form. This form was used to collect data regarding two variables: length of teaching contract and number of years teaching experience.

Data Collection Procedure

Questionnaires were mailed to each of the 56 teachers, and three follow-up contacts were made. Fifty-two teachers (93%) responded, and 46 (82%) returned usable questionnaires. The primary source of non-usable questionnaires was first year teachers.

Statistical Analysis

Descriptive statistics were used to summarize the data pertaining to individual teachers in the study. Because this study dealt with the entire population of teachers rather than a sample, inferential statistics were not used. However, to determine if relationships existed for the population, Pearson product moment correlation coefficients and stepwise multiple regression analysis were used as descriptive statistics. For Pearson product moment correlation coefficients, it was decided that all coefficients above .25 would be considered significant. For the regression analysis, the decision rule was that variables producing a change of R^2 of .05 or greater would be considered significant. This level was chosen because a .05 change in R^2 was the approximate amount required for a .05 level of significance if using a sample instead of a population.

Findings

Characteristics of Teachers

Of the 46 teachers included in the study, 21 (45.7%) were employed on a 12 month contract, 4 (8.7%) were employed on an 11-month contract, and 21 (45.7%) were employed on a 10-month contract. The majority (60.7%) of the teachers had taught vocational agriculture in their present school for five years or less. The mean number of years teaching experience for the teachers in the study was 5.3.

The majority (56.5%) of the teachers had taken at least one year of high school vocational agriculture. Sixteen teachers (34.8%) had taken four years of high school vocational agriculture while 20 (43.5%) had not taken vocational agriculture in high school. Most teachers (56.5%) were teaching in schools where 50% or less of their students were from rural areas. Fifteen teachers (32.6%) were in schools where over 75% of the students came from a rural area.

The typical vocational agriculture teacher in the study did not have a part-time job, assisted with fairs, perceived his/her princi-

pal's willingness to provide leave time as more than adequate, and perceived his/her travel budget as being adequate. In addition, the typical teacher had averaged visiting supervised occupational experience projects twice in 1980.

Relationship Between the Major Variables and Supervised Occupational Experience Program Scope

Pearson product moment correlation coefficients were computed between all possible pairs of variables using teacher as the unit of analysis. There was a positive relationship ($r = .66$) between SOEP scope and length of teaching contract. Data in Table 1 illustrate that of the teachers whose senior students had an average SOEP scope score in the lowest quartile range, 90% were employed on a 10-month contract. All of the teachers with an average SOEP scope score in the highest quartile range were on a 12-month contract.

Table 1

*Length of Teaching Contract
by Supervised Occupational Experience Scope
(n = 46)*

Length of contract	SOEP Scope Scores							
	0 - 3.5		3.6 - 15.9		16.0 - 33.6		33.7 - 60.8	
	%	n	%	n	%	n	%	n
10-month	90.9	(10)	50.0	(6)	38.5	(5)	0.0	(0)
11-month	0.0	(0)	33.3	(4)	0.0	(0)	0.0	(0)
12-month	9.1	(1)	16.7	(2)	61.5	(8)	100.0	(10)
TOTAL	100.0	(11)	100.0	(12)	100.0	(13)	100.0	(10)

Note: SOEP scope scores grouped by quartile range; $r = .66$.

Data in Table 2 illustrate that there was also a positive relationship between supervised occupational experience program scope and the following independent variables:

1. Percentage of students from a rural area ($r=.51$),
2. Number of supervisory home visits ($r=.45$),
3. Teacher assistance with fairs ($r=.30$), and
4. Teacher having high school vocational agriculture ($r=.27$)

Stepwise multiple regression was used to enter each independent variable into the multiple regression equation as a separate step with SOEP scope as the dependent variable. Using the decision rule that each variable will be significant if it produces a change in R^2 of .05, both length of teaching contract and percentage of students from a rural area were related to SOEP scope. Therefore, the data supported the hypothesis that there is a positive relationship between length of teaching contract and SOEP scope.

Conclusions

1. For this population, it appears that students in 12-month programs develop supervised occupational experience programs that are larger in scope.
2. The data indicates that teachers who have a higher percentage of students from a rural area have more of an opportunity to develop supervised occupational experience programs that are larger in scope.
3. Twelve-month teachers provide more personalized instruction as indicated by a higher degree of participation with fairs and more supervisory home visits.
4. Students in 12-month programs of vocational agriculture are more active in the supervised occupational experience program and therefore are receiving more of an opportunity to develop skills in an occupational setting.

Table 2

Pearson Product Moment Correlation Coefficients for the Major Variables
(n = 46)

	SOEP scope	Teacher contract	Teaching experience	Vo-ag	Percent rural	Fairs	Part-time job	Leave time	Travel money
Teacher contract	.663								
Teaching experience	.128	-.070							
Vo-ag	.274	.152	-.066						
Percent rural	.512	.337	.065	.219					
Fairs	.295	.219	.175	.191	.349				
Part-time job	-.220	-.337	.008	.061	-.168	-.261			
Leave time	.170	.000	.188	.139	.278	.137	.130		
Travel money	.021	-.165	.049	.187	.079	-.097	.351	.243	
SOEP visits	.450	.456	.234	.287	.211	.384	.001	-.015	-.131

Recommendations for Further Research

The following recommendations for further research are made on the basis of the findings of this study.

1. There is a need for similar studies to be conducted using other dependent measures such as level of adult and young farmer activity conducted by teachers, or community attitudes toward vocational agriculture programs.
2. Since the primary purpose of the summer program is to provide students with the opportunity to gain competencies that could not be developed at any other time, research should examine student achievement in relationship to length of program. Is learning influenced by length of programs?
3. The need exists to examine the cost effectiveness of the summer program in vocational agriculture.
4. The need exists to examine the influence of length of program on job placement. Longitudinal studies should be conducted to determine if graduates of year-round programs are more successful in the labor market.

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