

# Attitudes of State and National Officers of Vocational Agriculture Teachers Associations Toward State Supervision and Teacher Education in Agriculture

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State supervision and teacher education in agriculture have been an important facet of vocational agriculture programs since their inception. Vocational agriculture teachers have depended on their supervisors from the various state departments of education for the leadership and support needed to conduct quality local programs. At the same time, they have relied on university teacher educators to provide them with appropriate pre-service and in-service preparation.

Several recent studies such as "A Nation at Risk" and "A Nation at Work" have attempted to evaluate the quality of education in the United States. The authors of "A Nation at Risk" concluded that one major problem with education in America is that many teachers are not properly prepared to teach.

Teacher education programs initially addressed only the teaching function (Berkey, 1981), and extensive research has been conducted in the area of teacher effectiveness. However, the functions and responsibilities of teacher educators and state supervisors have expanded since the passage of the Vocational Education Act of 1963.

The results of this expansion were addressed by McCormick (1985) in a speech to the American Association of Teacher Educators in Agriculture. He reported the results of an informal survey of the presidents of the state vocational agriculture teachers' associations. The results indicated that 33% of the officers felt that assistance to teachers had decreased, 34% indicated that they had not been visited by a teacher educator in the past five years and 17% indicated that they felt teacher educators were not very aware or concerned about the problems of teachers.

Recent nationwide research concerning state supervision in agricultural education, with the exception of Barrick and Warmbrod (1982), has been limited. Barrick and Warmbrod studied several aspects of state supervision, including the current and expected roles of state supervisors of vocational agriculture as perceived by state supervisors and vocational agriculture teachers.

This study was designed to assess the opinions of state and national vocational agriculture teacher association officers toward state supervision and teacher education in agriculture. It was felt that state and national association officers would be in a position to accurately judge the activities of teacher educators and state supervisors because they have a close working relationship with both groups.

## Purpose and Objectives

The purpose of this study was to determine the attitudes of state and national officers of vocational agriculture teachers' associations

toward state supervision and teacher education in agriculture in the United States. The objectives were:

1. To secure demographic information about state and national vocational agriculture teacher association officers.
2. To determine the state and national officers' perceptions of teacher education and supervision in agriculture in the United States.
3. To determine if differences exist in the perceptions of these officers toward state supervision and teacher education according to the levels of the demographic variables.
4. To determine if differences exist between the officers' responses to identical aspects of state supervision and teacher education.

The demographic variables used in the analysis of variance were years of experience, age, school, location, length of teaching contract, number of visits from state supervisors and teacher educators in the past five years, number of teachers in the vocational agriculture department, level of college education, and National Vocational Agriculture Teachers Association region.

#### Procedures

The population (N=305) consisted of officers of all state associations and the National Vocational Agriculture Teachers Association who were teaching at the time of the study. The sample was drawn from the 1984-85 directory published by the National Vocational Agriculture Teachers' Association.

Cochran's sample size formula resulted in a sample size of 110. A sample of 159 was used in the study in anticipation of a response rate as low as 70%. After the sample size was determined, a table of random numbers was utilized to select the sample.

A closed-form questionnaire designed to secure the information needed to satisfy the objectives of the study was developed. The instrument was field tested using ten vocational agriculture teachers including four who were former state association officers. Changes indicated by the field test were incorporated into the final instrument.

Instrument reliability was calculated using Cronbach's alpha and yielded the following estimates: State supervision scale,  $r=.87$ , Teacher education scale,  $r=.91$ , Combined scale reliability,  $r=.90$ .

After three mailings and a phone follow-up, a response of 151 (95.0%) was achieved. Eight of the nine non-respondents had left teaching after the 1984-85 National Vocational Agriculture Teachers' Association Directory was published. The ninth non-respondent could not be reached after three attempts. Since comparisons between those who responded by mail and those who responded by telephone yielded no statistically significant differences, both groups were combined for data analysis.

The data were analyzed using descriptive statistics, one-way analyses of variance with post hoc Sheffe' test, and T-tests. The alpha level was set at .01 to alleviate the problems associated with multiple F and T tests.

## Findings

The officers were asked to rate the activities of state supervisors and university faculty in their state. The state supervisors statement that received the highest mean rating (1.79) related to the quality of the working relationship between state supervisors and teachers, while the statement that received the lowest mean rating (2.30) was "state staff's efforts in helping teachers improve the quality of their teaching."

The university faculty statement that received the highest mean rating (2.09) was "usefulness of workshops offered," while the statement that received the lowest mean rating (2.68) was "opportunity for agriculture teachers to have input in faculty ag. ed. policies." The responses are presented in Table 1.

Table 1

### Ratings Assigned to State Supervision and Teacher Education Efforts

Statement	n	<u>State Supervisors</u>		<u>Teacher Educators</u>		df	T
		<u>Mean<sup>a</sup></u>	<u>SD</u>	<u>Mean<sup>a</sup></u>	<u>SD</u>		
1. Usefulness of Workshops Offered	129	1.99	.76	2.08	.84	128	-1.17
2. Representation of Ag. Ed. to Those Outside the Profession	142	1.93	.91	2.20	1.00	143	-2.77*
3. Quality of Working Relationship with Teachers	143	1.79	.88	2.10	.99	144	-3.54**
4. Quality of Communications with Teachers	143	1.95	.87	2.29	1.00	144	-3.63**
5. Opportunity for Teachers to Have Input in Ag. Ed. Policies	143	2.20	.98	2.68	1.06	144	-5.09**
6. Efforts to Help Teachers Improve Their Teaching	143	2.30	.96	2.40	1.00	144	-1.08
7. Efforts to Help Teachers Get Up-To-Date Information	143	2.24	.97	2.42	.97	144	-2.08
Grand Mean	127	2.00	.67	2.26	.80	128	3.60**

<sup>a</sup>excellent=1, good=2, fair=3, poor=4 and unacceptable=5.

\*p<.01. \*\*p<.001.

When the ratings of the state supervisors were compared with those of the teacher educators using the paired t-test, it was found that the state supervisors were rated significantly higher on four areas: how well they represented vocational agriculture to those outside the profession, quality of working relationships, quality of communications and opportunity for teacher input. There was no significant difference in quality of workshops offered, effort to help teachers secure up-to-date information or effort to help teachers improve the quality of their teaching. The state supervisors' grand mean for these seven items was significantly higher than the grand mean for teacher educators, as shown in Table 1.

The Likert-type scale items were combined into a grand mean for both state supervision and teacher education. Analyses of variance and post hoc Scheffe' tests produced only one significant relationship. Officers who had received 0-2 visits from college-university faculty in the past five years responded significantly less positive (2.60) to teacher education questions than officers who had received 3-7 visits (2.04) or 8 or more visits (2.02). These data are presented in Table 2. No differences existed among the grand means for state supervisors by the number of visits that officers received from state supervisors. In addition, no differences existed among the grand means for both state supervisors and teacher educators for the other variables listed in objective 4.

Table 2

ANOVA of Officers' Opinions of Teacher Educators' Activities by Number of Visits Officers Received From Teacher Educators (n=135)

Number of Visits			F-Ratio
0-2 Visits (n=53)	3-7 Visits (n=40)	8+ Visits (n=43)	
2.60	2.04	2.02	9.62*

Note. Scheffe' post hoc analysis indicated a significant difference between 0-2 visits and 3-7 visits and between 0-2 visits and 8+ visits.

\*p<.0001.

The officers were also asked to rank seven areas in which efforts by state staff and college/university faculty would be most likely to result in improvement in vocational agriculture programs in their state. The officers indicated that more money for state staff activities, more state staff and more teacher visits were the three state staff efforts that would result in the most improvement. They indicated that more money for faculty activities, more workshops and more teacher visits were the three faculty activities that would result in the most improvement. These data were displayed in Table 3.

When the officers were asked to rate the overall performance of state supervisors and teacher educators by assigning "academic grades"

Table 3

Rank Order of State Staff and Faculty Efforts Most Likely to Result in Improvement in Vocational Agriculture Programs

Group Effort	Mean <sup>a</sup>	SD
State Staff (n=141)		
More money for state staff activities	2.86	1.69
More state staff	3.46	2.40
More teacher visits	3.99	1.73
More support staff	4.09	1.93
Better communications	4.39	1.98
More workshops	4.51	1.73
More input from teachers	4.68	1.79
College/university faculty (n=133)		
More money for faculty activities	3.05	1.90
More workshops	3.80	1.96
More teacher visits	3.96	1.96
Better communications	4.07	2.05
More faculty	4.10	2.10
More input from teachers	4.12	2.05
More support staff	4.74	1.82

<sup>a</sup>1=most likely, 7=least likely.

on a scale of A to F, the supervisors received a significantly higher grade than the teacher educators. The supervisors received a mean grade point average of 2.08 (just below a "B") while the teacher educators received a 2.41 (just above a mid "C").

#### Recommendations

The following recommendations were made based upon the findings of this study:

1. The data indicate that those officers who were visited more often by college/university faculty had higher opinions of college/university faculty activities. It is recommended that college/university faculty make a greater effort to visit these teachers more frequently if they wish to improve the opinions of state and national officers toward their programs.

2. University faculty received lower ratings on four areas than the ratings received by state supervisors. It is recommended that university faculty examine their own activities in the areas covered by this study to determine if improvements should be made.

3. The ratings for state supervisors were all around the 2.00 range. Even though this is a good rating, room for improvement in the officers' perceptions exists. It is recommended that state supervisors examine the results of this study and determine if improvements should be made.

4. It is recommended that a similar study be conducted using a population of vocational agriculture teachers to determine what differences, if any, exist between the opinions of officers and the teachers they represent.

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