

PERCEPTIONS REGARDING PLANNING ACTIVITIES AND SUPERVISION STRATEGIES FOR SUPERVISED AGRICULTURAL EXPERIENCE PROGRAMS

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Abstract

The purpose of the study was to describe the perceptions of Tennessee agriculture teachers regarding planning activities and supervision strategies for supervised agricultural experience programs (SAEP). Data were collected via a mailed questionnaire from 150 randomly selected teachers. Agriculture teachers who taught in multiple teacher departments, subscribed to The Agricultural Education Magazine, and counted their students SAEPs as part of their grade in agricultural education classes had more positive perceptions regarding planning activities. Agriculture teachers who were not enrolled in agricultural education courses while high school students, counted their students SAEPs as part of their grade in agricultural education classes, and had a class period during the school day for SAEP supervision had more positive perceptions regarding supervision strategies. Recommendations include encouraging local school systems to consider having multiple teacher agricultural education departments, conducting research to determine if there are benefits of counting students' SAEPs as part of their grade in agricultural education, and determining if there are benefits of providing teachers with a period for SAEP supervision during the school day.

Supervised agricultural experience programs (SAEPs) have always been important in agricultural education. SAEPs allow agricultural education students to learn by doing whereby they apply agricultural knowledge and skills learned in the classroom and laboratory in an "away from the classroom setting" (Experiencing Agriculture, 1992). Supervised experience programs "bridge the gap" between classrooms and work places by providing students opportunities for application and transfer (Phipps & Osborne, 1988).

For SAEPs to be successful, they must be properly planned and adequately supervised. Good planning helps insure at least a moderate amount of success by students (Binkley & Byers, 1984). Proper planning may help students avoid costly mistakes, save time and materials, have good results instead of poor results, and allow students to experience success rather than failure (Binkley & Byers, 1984).

The potential for successful SAEPs resides primarily with agriculture teachers. Agriculture teachers play critical roles in promoting and managing successful student experiences (Experiencing Agriculture, 1992). Agriculture teachers have the responsibility for guiding students in selecting, planning, and developing appropriate SAEPs as well as supervising students on a regular basis (Experiencing Agriculture, 1992).

To assist students in planning their SAEPs, agriculture teachers need to provide systematic instruction throughout the school year (Experiencing Agriculture, 1992). It is also helpful to consider the needs and interests of students, needs of the agricultural industry, and availability of resources when helping students plan their SAEPs (Experiencing Agriculture, 1992).

Probably the greatest responsibility agriculture teachers must perform with SAEPs is that of supervision. McCracken (1975) commented that

the success or failure of supervised occupational experience programs for students, depends, to a large degree, upon the effectiveness of supervision by the teacher. While supervision is to provide individual instruction to students, it can also develop essential cooperative relationships with employers and parents/guardians (Experiencing Agriculture, 1992). Watkins (1981) reported that the majority of agricultural employers in her study believed that students benefitted by teacher visits to the work site. Harris (1983), Gibson (1987) and Anyadoh (1989) all reported positive relationships between the number of supervisory visits and quality of supervised experience programs. Without supervision, supervised experience programs would be like schools without teachers (McMillion & Auville, 1976).

Various researchers have concluded that proper and adequate supervision must occur for SAEPs to be successful. Osborne (1988) concluded that teacher involvement in planning and supervision was linked to the nature of supervised programs and student backgrounds. Students from farms with traditional programs were more likely to receive needed assistance. Osborne (1988) also concluded that teachers on extended contracts were more heavily involved in planning and supervision strategies. Herren and Cole (1984) found that teachers should have at least one period for SOEP supervision; teachers should maintain accurate records on mileage, student progress, and recommendations; and that the teacher is the only person who can do an effective job of SOEP supervision. Beeman (1967) reported that more than one-half of school administrators disagreed with releasing agriculture teachers from school duties to make supervisory visits.

Lindsey (1978) reported that with an increased number of limited-opportunity students enrolling in agricultural education and with fewer farm students enrolling in courses, teachers will have to devote extra effort and time to ensure that students plan successful supervised experience programs.

Agricultural education teachers will have to try harder to make sure students enrolled in specialized courses receive instruction pertaining to SAEPs, that appropriate programs are planned, and that all students are supervised.

Purpose and Objectives

The purpose of the study was to describe the perceptions of Tennessee agriculture teachers regarding planning activities and supervision strategies used with SAEPs. Furthermore, the study sought to describe relationships between teachers' perceptions regarding planning activities, supervision strategies and selected teacher demographics.

Specific objectives of the study were to:

- (1) describe the perceptions of Tennessee agriculture teachers regarding planning activities for SAEPs;
- (2) describe the perceptions of Tennessee agriculture teachers regarding supervision strategies used with SAEPs; and
- (3) discuss the relationships between teachers' perceptions regarding planning activities and supervision strategies used with SAEPs with selected teacher demographics.

Methods and Procedures

Population and Sample

The population for the study was all Tennessee agriculture teachers who had taught at least one year at the beginning of the 1993-1994 school year (N=225). An up-to-date list of names was obtained from the Tennessee State Department of Education, Vocational Education Department, to serve as the sampling frame. Using a random sampling procedure, a sample of 150 teachers were selected

to be included in the study. A confidence level of 95 percent was also established.

Instrumentation

Data were collected using a mailed questionnaire containing four parts. Only data from the last two parts are reported in this study. Part III assessed agriculture teachers' perceptions regarding planning activities for SAEPs and part IV assessed agriculture teachers' perceptions regarding supervision strategies used with SAEPs. A four-point Likert-type scale was used to assess agriculture teachers' perceptions on both parts. A panel of experts, consisting of agriculture teachers not selected as part of the sample, provided feedback on the instrument and determined the instrument had content validity. Cronbach's Alpha coefficients of .87 for the 10 item Likert-type scale on planning activities and .80 for the 15 item Likert-type scale for supervision strategies were calculated during a preliminary pilot test.

After two follow-up mailings, the final response rate was 71.3 percent. An analysis of early and late respondents failed to reproduce evidence of any substantial differences between the two groups. Therefore, findings from this study are assumed to be generalizable to the population from which it was drawn (Miller & Smith, 1983).

Analysis of Data

Descriptive statistics were used to summarize data. t-tests were used to describe relationships between nominally-scaled independent variables and the intervally-scaled dependent variables, overall perception regarding planning strategies and supervision strategies. Pearson correlation coefficients were used to describe the magnitude of relationships between intervally-scaled independent variables and intervally-scaled dependent variables. Davis' (1971) convention was used to interpret these relationships. An alpha level of .05 was set a priori.

Results

Objective One

Agriculture teachers responded to a set of 10 Likert-type statements to describe their perceptions regarding planning activities for SAEPs. Table 1 reports the perceptions of agriculture teachers regarding planning activities for SAEPs. The scale of measurement ranged from 1 = strongly disagree to 4 = strongly agree. Mean scores ranged from 2.70 to 3.34. The highest rated statement was "Agricultural education teachers should help students plan and carry out worthwhile supervised agricultural experience programs" ($\underline{M} = 3.34$, $\underline{SD} = .53$). The lowest rated statement was "New students enrolling in agricultural education should be visited before the school year begins" ($\underline{M} = 2.70$, $\underline{SD} = .70$).

Objective Two

Agriculture teachers responded to a set of 15 Likert-type statements to describe their perceptions regarding supervision strategies used with SAEPs. The scale of measurement ranged from 1 = strongly disagree to 4 = strongly agree. Table 2 reports the perceptions of agriculture teachers regarding supervision strategies used with SAEPs. Mean scores ranged from 1.85 to 3.59. The highest rated statement was "Agricultural education teachers should supervise students' supervised agricultural experience programs during the summer months as part of their extended contracts" ($\underline{M} = 3.59$, $\underline{SD} = .49$). The lowest rated statement was "Students and their supervised agricultural experience programs should be visited **only** during the summer" ($\underline{M} = 1.85$, $\underline{SD} = .45$).

Objective Three

t-tests were used to analyze differences in means when teachers were grouped by demographic variables. Demographic variables used in the

Table 1. Agricultural Education Teacher Perceptions Regarding Planning Activities For Supervised Agricultural Experience Programs

Statement Regarding Planning Activities for Supervised Agricultural Experience Programs	Mean	S.D.
Agricultural education instructors should help students plan and carry out worthwhile supervised agricultural experience programs.	3.34	.53
Parents should be involved in helping plan their child's supervised agricultural experience program.	3.23	.51
Students should have written plans for conducting their supervised agricultural experience programs.	3.20	.52
Real problems encountered by students in their supervised agricultural experience programs should be used as topics for classroom instruction.	3.20	.44
Class time should be used to update record books.	3.05	.62
Class time should be used for individual supervised agricultural experience planning.	3.03	.62
Orientation programs on supervised agricultural experience should be presented to students and their parents at the beginning of the school year.	3.01	.51
Schools should provide adequate facilities and resources for students to use to complete supervised agricultural experience programs if students lack the appropriate resources at home and/or farm.	3.01	.77
Students' supervised agricultural experience programs should be planned to meet their career objectives.	2.97	.52
New students enrolling in agricultural education should be visited before the school year begins.	2.70	.70

Scale: 1 = strongly disagree, 2 = disagree, 3 = agree, 4 = strongly agree

analysis were the following: a) number of teachers in department; b) whether teachers taught semester courses in agricultural education; c) have membership in professional organizations; d) whether teachers subscribed to The Agricultural Education Magazine; e) whether teachers attended summer ag teacher conferences; f) length of teaching contract; g) whether teachers were enrolled

in agricultural education courses while high school students; h) whether teachers conducted supervised experience programs while high school students; i) whether teachers received grades for their supervised experience programs while high school students; j) whether teachers currently grade their students' SAEPs; and k) whether teachers have release time during the day to supervise students.

Table 2. Agricultural Education Teacher Perceptions Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs

Statement Regarding Supervision Strategies Used With Supervised Agricultural Experience Programs	Mean	S.D.
Agricultural education teachers should supervise students' supervised agricultural experience programs during the summer months as part of their extended contracts.	3.59	.49
Supervised agricultural experience programs must be supervised during the summer months as well as during the school year.	3.48	.45
Teachers should conduct on-site supervisory visits at students' homes, farms, and workplaces.	3.34	.51
For supervision to be effective, teachers need to make on-site supervisory visits.	3.32	.59
Supervision should be used as a teaching/learning opportunity.	3.31	.46
Supervision should motivate students to carry on successful supervised agricultural experience programs.	3.29	.46
Students should receive supervisory visits when they encounter problems with their supervised agricultural experience programs.	3.29	.51
Teachers should talk with parents on supervisory visits.	3.29	.50
Teachers should keep written records of students' supervisory visits.	3.29	.60
Students' supervised agricultural experience programs should be evaluated on a regular basis.	3.21	.47
School administrators should be supportive of time off during the school day for teachers to make supervisory visits.	3.16	.73
Teachers should inform students of their plan for supervised agricultural experience visits ahead of time.	3.11	.59
Students should be visited as least once per semester.	2.90	.64
Students should be visited during each grading period.	2.22	.69
Students and their supervised agricultural experience programs should be visited only during the summer.	1.85	.45

Agriculture teachers who taught in multiple teacher departments had more positive perceptions regarding planning activities for SAEPs than those who taught in single teacher departments ($t = -2.34$, $p = .021$). Teachers who also subscribed to The Agricultural Education Magazine had a more positive perception regarding planning activities for SAEPs than those who did not ($t = 2.56$, $p = .012$). Agriculture teachers who counted their students' SAEPs as part of their grade in agricultural education classes had more positive perceptions regarding planning activities for supervised agricultural than those who did not ($t = 2.46$, $p = .016$).

Agriculture teachers who were not enrolled in agricultural education courses while high school students had more positive perceptions regarding supervision strategies used with SAEPs than those who did take agricultural education courses ($t = -2.02$, $p = .046$). Agriculture teachers who counted their students' SAEPs as part of their grade in agricultural education classes had more positive perceptions regarding supervision strategies used with SAEPs than those who did not ($t = 2.36$, $p = .02$). Teachers who had a class period during the school day to leave and supervise students' SAEPs had more positive perceptions regarding supervision strategies used with SAEPs than those who did not ($t = 2.62$, $p = .01$).

Pearson correlation coefficients were calculated to describe the direction and magnitude of relationships between interval-scaled independent variables and teachers' overall perception regarding planning activities and supervision strategies. Table 3 reports these relationships.

A moderate, positive, linear relationship existed between teachers' overall perception regarding planning activities and total number of days spent teaching first year students about SAEPs ($r = .38$). A moderate, positive, linear relationship existed between teachers' overall perception regarding planning activities and total number of days spent

teaching other agricultural education students about SAEPs ($r = .30$). There was a moderate, positive, linear relationship between teachers' overall perception regarding planning activities and total number of days spent during the school year and summer months supervising students' SAEPs ($r = .34$). A moderate, positive, linear relationship existed between teachers' overall perception regarding supervision strategies and total number of days spent during the school year and summer months supervising students' SAEPs ($r = .30$). All other relationships were low to negligible.

Conclusions and Recommendations

Based on the findings of the study, the following conclusions were determined and recommendations offered.

- 1) Agriculture teachers in Tennessee have relatively positive perceptions regarding planning activities and supervision strategies used with SAEPs. They agree that they should be involved in helping students plan their SAEPs and that they should supervise students' SAEPs during the summer as part of their extended contract.
- 2) Agriculture teachers teaching in multiple teacher departments have more positive perceptions regarding planning activities for SAEPs than those who taught in single teacher departments. Previous research concludes that teachers in multiple teachers departments can maintain workable student-teacher ratios to promote the continuation of active SAEPs (Boone, Elliot, & Doerfert, 1988). If economically feasible, local school systems with agricultural education programs should consider having multiple teacher agricultural education departments. Research should be conducted to describe and discuss the benefits of having multiple teacher departments.

Table 3. Relationships Between Intervally-Scaled Demographic Variables and Teachers' Perceptions Regarding Planning Activities and Supervision Strategies For Supervised Agricultural Experience Programs

Variable	Planning	Supervision
Number of Years Teaching Agricultural Education Age .08	.04	.13
	.18	
Total Number of Students Enrolled in Agricultural Education Program Last Year	.27*	.19
Total Number of Students in Program Last Year Conducting Supervised Agricultural Experience Programs	.27*	.16
Total Number of Days Spent Teaching First Year Students About Supervised Agricultural Experience Programs	.38*	.28*
Total Number of Days Spent Teaching Other Students About Supervised Agricultural Experience Programs	.30	.29*
Total Number of Days Spent During School Year and Summer Months Supervising Students' Supervised Agricultural Experience Programs	.34	.30*
Total Amount of Training Teachers Has Received About Supervised Agricultural Experience Programs	.19*	.10

* p < .05

- 3) Agriculture teachers subscribing to The Agricultural Education Magazine have more positive perceptions regarding planning activities for SAEPs than those who did not. While the research findings show this, subscribing to The Agricultural Education Magazine may not influence their perception of SAEPs. Teacher may just be supporting one part of professional development in agricultural education.
- 4) Agriculture teachers counting their students' SAEPs as part of their grade in agricultural education have more positive perceptions regarding planning activities and supervision strategies used with SAEPs. Additional research should be conducted to determine if

there are any benefits of counting SAEPs as part of students' grade in agricultural education.

- 5) Agriculture teachers who did not enroll in agricultural education courses while high school students have more positive perceptions regarding supervision strategies used with SAEPs than those who did. Why did teachers who were enrolled in agricultural education courses while high school students not have a more positive perception? Did they not conduct supervised programs in agriculture? Were they never supervised by their teachers? Did they receive poor supervision when their teacher did visit them? Research should be conducted to describe plausible reasons.

6) Agriculture teachers having a class period during the school day to supervise students' SAEPs have more positive perceptions regarding supervision strategies used with SAEPs than those who did not. However, only 20 percent of agricultural education teachers have such a period for supervision (Osborne, 1988; Swortzel, 1994). If new types of SAEPs are going to be conducted by students today, especially school-based experience programs, then teachers must have release time to supervise their students. Additional research needs to be conducted to determine the benefits of having such a period during the school day for supervision.

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