

**The Relative Level of Difficulty Associated with
Responsibilities of Vocational Agriculture
Teachers in Georgia**

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There are many duties and responsibilities teachers must perform in order to conduct effective vocational agriculture programs. Many people do not realize the responsibility they accept upon becoming teachers of vocational agriculture (Brown, 1977). According to Amberson and Bishop (1982), there are four major identifiable facets to the role of the vocational agriculture teacher. These are: (a) providing classroom and laboratory instruction, including instruction in agricultural science, leadership, and mechanics, (b) coordinating supervised occupational experience programs (SOEP), (c) advising the Future Farmers of America Chapter (FFA), and (d) instructing out-of-school youth and adults in production agriculture/agribusiness. In addition to these responsibilities, Lee (1978) also listed activities related to the administration of the program and management of school facilities.

It is important to determine which parts of the vocational agriculture program are the most difficult for teachers to accomplish. Once known, adjustments can be made in teacher education programs that will better prepare prospective teachers for a challenging career in teaching vocational agriculture. Also, such research will provide valuable information for planning and conducting inservice activities for teachers of vocational agriculture.

Purpose and Objectives

The purpose of this descriptive study was to determine the relative level of difficulty associated with some of the responsibilities or duties of vocational agriculture teachers in conducting comprehensive vocational programs in Georgia secondary schools. The specific objectives of the study were to:

1. Assess the relative level of difficulty teachers have in: administering vocational agriculture programs, conducting classroom and laboratory instruction, advising the local chapter of the Future Farmers of America, conducting supervised occupational experience programs, and working with young and/or adult farmer programs.
2. Compare the difficulty ratings of duties and responsibilities of vocational agriculture teachers with selected program and teacher variables.

Methodology

The population for the study consisted of all 270 vocational agriculture instructors in Georgia high schools with vocational agriculture programs in 1984. From the population, 150 vocational agriculture instructors were randomly selected and asked to participate in the study.

The questionnaire used was adapted from one used by Scheid (1982) in a similar study of Iowa vocational agriculture teachers. Revisions in the instrument were made to more adequately reflect vocational agriculture programs in Georgia. The instrument was comprised of two parts: (a) a section to elicit the teachers' perceptions regarding 92 tasks or responsibilities in a comprehensive vocational agriculture program, and (b) a section to obtain information about the instructors and their programs. Respondents were asked to rate on a 9-point scale (1=no difficulty, 5=moderate difficulty, and 9=extreme difficulty) the degree of difficulty each of the tasks or responsibilities were for them to accomplish in their vocational agriculture program.

The questionnaire items covered five aspects of a comprehensive vocational agriculture program; therefore, the items were divided into five program area scales. The scales and the number of items comprising each were: Administration (20), Classroom and laboratory instruction (24), Supervised occupational experience (19), Future Farmers of America (14), Young and/or adult farmers (15). Internal consistency and inter-scale analyses were computed, as a part of data analysis, on the five scales and the total scale. The reliability coefficients (Cronbach's coefficient alpha) ranged from .90 to .95 for the scales, indicating the scales were internally consistent.

A copy of the instrument and an introductory letter were mailed to each member of the sample. Two follow-ups were conducted to encourage participation in the study. Usable responses were obtained from 95 of the teachers for a response rate of 63.3%. A random sample of 10 nonrespondents was surveyed by telephone to compare results with the respondent group. Using a *t*-test, no significant differences were found between the respondents and the nonrespondents contacted by telephone.

The data were analyzed to obtain frequencies, means, and standard deviations for each item. A *t*-test was used to test for significant differences between the program area ratings of teachers in single or multiple teacher programs. The Pearson product-moment correlation coefficient was used to detect relationships between the program area settings and selected teacher and program variables.

Findings and Discussion

Table 1 reveals the mean ratings and standard deviations for each of the five program area scales. The program area rated as causing the greatest degree of difficulty was "Young and/or adult farmers", with a mean of 4.27. This was followed, in descending order, by "Supervised occupational experience program", "Classroom and laboratory instruction", "Administration", and "Future Farmers of America". All of the program areas were rated below the midpoint of the 9-point scale implying that no single area of the program causes major problems for teachers in Georgia.

The 20 most difficult duties or responsibilities, regardless of program area, are shown in Table 2 along with the program area from which they were derived. Only 10 of the 20 responsibilities were rated above 4.5 on the 9-point scale. This finding suggests that there are relatively few responsibilities that present more than an average level of difficulty for teachers to accomplish. Approximately one-third (seven) of the most difficult responsibilities were in the area of "Young and/or adult farmers" and almost one-third (six) were in the "Supervised occupational experience" area. Of the remaining responsibilities, four were in "Classroom and laboratory instruction", two were in "Future Farmers of America", and one was in "Administration."

Comparisons of program area ratings between teachers in single teacher departments and teachers in multiple teacher departments are presented in Table 3. To determine if any significant differences existed between the two groups, a *t*-test was utilized. Results indicated that no significant differences existed between the two groups at the .05 level. The program area causing the greatest degree of difficulty for the two groups was "Young and/or adult farmers." The area causing the least difficulty for the instructors in single teacher departments was "classroom and laboratory instruction." Instructors in multiple teacher departments experienced least difficulty in the "Future Farmers of America." The results indicated that teachers in single person departments and teachers in multiple teacher departments did not experience a significantly different level of difficulty in the five program areas.

Data presented in Table 4 report the correlation coefficient and probability level of the program areas and selected program and teacher variables. Only negligible relationships existed between the five program areas and total school enrollment, vocational agriculture enrollment, number of classes taught by the instructors, and years teaching experience. The results indicated that these variables were not substantially related to the degree of difficulty encountered by the vocational agriculture instructors. It can be concluded that vocational agriculture instructors in Georgia were very homogeneous in their responses.

Table 1

Difficulty of Program Areas as Rated by Vocational Agriculture Teachers in Georgia

Program area	\bar{X}	SD
Young and/or adult farmers	4.27	1.71
Supervised occupational experience program	3.89	1.36
Classroom and laboratory instruction	3.52	1.15
Administration	3.50	1.25
Future Farmers of America	3.49	1.23

Note. 1=no difficulty, 5=moderate difficulty, 9=extreme difficulty.

Table 2

Twenty Most Difficult Responsibilities as Perceived by Georgia Vocational Agriculture Teachers

Rank	Responsibility (program area)	\bar{X}	SD
1	Implementing computerized instruction into the total vo-ag program (instruction)	6.08	2.57
2	Requiring participation in SOE by all students (SOEP)	5.38	2.62
3	Securing young and/or adult farmer enrollment (Young/adult farmer)	4.97	2.31
4	Teaching students with different ability levels (Instruction)	4.92	2.25
5	Conducting year-round adult programs (Young/adult farmer)	4.90	2.32
6	Completing follow-up activities on vo-ag graduates (Administration)	4.83	2.38
7	Finding time to conduct young/adult farmer classes (Young/adult farmer)	4.68	2.54
8	Identifying an SOE program appropriate for each student (SOEP)	4.68	2.10
9	Developing individualized educational programs for disabled students (Instruction)	4.62	2.15
10	Organizing and keeping a SOE file on each student (SOEP)	4.55	2.22

Table 2 continued

Rank	Responsibility (program area)	X	SD
11	Completing a follow-up of all SOE programs (SOEP)	4.34	1.99
12	Evaluating the effectiveness of your adult program (Young/adult farmer)	4.33	2.04
13	Advising FFA Alumni group(s) (FFA)	4.31	2.22
14	Finding time to conduct follow-up visits of farmers (Young/adult farmer)	4.28	2.00
15	Assisting young and/or adult farmers with instruction on the farm (Young/adult farmer)	4.24	2.03
16	Monitoring completion and submission of FFA reports and application forms (FFA)	4.23	2.09
17	Maintaining young and/or adult farmer programs (Young/adult farmer)	4.22	2.08
18	Providing a variety of occupational experiences in diverse areas of agriculture (SOEP)	4.20	1.86
19	Recognizing and working with students with learning disabilities (Instruction)	4.16	1.93
20	Conducting field trips and tours to students' SOE programs (SOEP)	4.04	2.17

Note. 1=no difficulty, 5=moderate difficulty, 9=extreme difficulty.

Recommendations

The findings reported in this investigation served as basis for the following recommendations for teacher education at the preservice and inservice levels:

1. No single area of the vocational agriculture program was found to cause more than moderate problems for teachers. Of the five areas studied, "Young and/or adult farmers" had the highest overall problem rating. Similar findings were reported in studies by Scheid (1982) in Iowa and Sunderhaus (1984) in Indiana. Seven of the top 20 most difficult responsibilities were in this area. Since working with adults is a part of the vocational agriculture program in a majority of the schools in the study, teacher education programs should strengthen their emphasis on working with young and adult farmers at the preservice and inservice levels.

2. The second most difficult area for teachers was the "Supervised occupational experience program." Of the top 20 most difficult responsibilities, six were in this area. The problems in this area can be addressed at both the preservice and inservice levels. Teachers need assistance and ideas on ways to involve all students, provide a variety of alternatives, and to perform the necessary administrative functions of the supervised occupational experience program.

3. Three of the 20 most difficult responsibilities for teachers were related to working with students who have special needs. This observation suggests that preservice and inservice teacher education programs need to include ways of working with students in individualized and group settings to meet students' varying needs and abilities.

4. The vocational agriculture instructors in Georgia appeared to be very homogeneous in their responses. None of the variables studied had substantial impact on the ratings of the teachers. In planning and conducting inservice programs, teacher educators do not need to be especially concerned with differences in vocational agriculture programs or teachers. They may, instead, concentrate on structuring inservice programs that will help alleviate the problems and concerns encountered by most vocational agriculture programs.

Table 3

A Comparison of Program Area Ratings Between Teachers in Single or Multiple Teacher Programs

Program area	Single teacher department	Multiple teacher department	t-Value	p
	$\frac{\bar{X}}{SD}$ n = 42	$\frac{\bar{X}}{SD}$ n = 52		
Administration	3.52 1.01	3.47 1.43	0.20	0.838
Classroom and laboratory	3.45 0.88	3.53 1.35	-0.36	0.718
Supervised occupational experience program (SOEP)	3.73 1.83	4.01 1.47	-0.97	0.334
Future Farmers of America (FFA)	3.68 1.19	3.35 1.27	1.26	0.211
Young and/or adult farmers	4.44 1.69	4.11 1.73	0.93	0.356

Note. 1=no difficulty, 5=moderate difficulty, 9=extreme difficulty.

Table 4

Relationship Between Program Area Ratings and Selected Program and Teacher Variables

Program area	School enrollment n=91	Vo-Ag enrollment n=95	No. classes taught n=95	Teaching experience n=91
Administration	.006 ^a .949 ^b	-.152 .140	-.056 .591	.179 .090
Classroom and laboratory instruction	-.081 .445	-.174 .091	-.080 .440	-.069 .518
Supervised occupational experience program (SOEP)	.016 .882	-.136 .190	-.023 .829	-.171 .106
Future Farmers of America (FFA)	-.073 .493	-.178 .084	-.132 .201	-.145 .169
Young and/or adult farmers	.007 .951	-.176 .088	.143 .166	-.145 .170

^a = Pearson product-moment coefficient
^b = Probability

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