

**Problems of Beginning Teachers of
Vocational Agriculture in Iowa**

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Studies by Farrington (1981), Kahler (1974), and Webb, Stoner, and Vaclavik (1977) found that one of the major concerns of teacher educators in agricultural education is that many vocational agriculture teachers leave teaching within a few years after entering the profession. An explanation needs to be found why so many fail to make a career of teaching vocational agriculture. Are young teachers dissatisfied with their jobs? Are beginning teachers prepared to start teaching? Do the difficulties of the first year contribute to a short-lived teaching career? What areas of the vocational agriculture program cause the most problems for teachers?

Research conducted by Farrington (1981), Kahler (1974), and Webb, Stoner, and Vaclavik, (1977) indicates that activities involving adult education cause major problems for beginning teachers of vocational agriculture. In addition, certain activities in the areas of supervised occupational experience, classroom teaching, advising the FFA, and program administration are also sources of problems for teachers.

Purpose of the Study

The purpose of this study, Scheid (1982), was to determine the problems encountered by beginning teachers of vocational agriculture and to compare these findings with problems experienced by vocational agriculture teachers who have been in the profession for varying numbers of years.

More specifically, the study was designed to answer the following questions:

1. What are the major problems encountered by beginning teachers in implementing comprehensive educational programs of agricultural education in secondary programs?
2. Which organizational and instructional areas of the vocational agriculture program cause problems for teachers?
3. Are organizational and instructional areas identified as being problem areas for beginning vocational agriculture teachers different from those of more experienced teachers?

4. What changes are needed in the teacher education program at the university level to better prepare prospective teachers of vocational agriculture and to improve teacher inservice programs?

Methods and Procedures

Program activities conducted by vocational agriculture teachers were identified through a review of literature and related research. A list of activities was developed and submitted to a committee for review. A total of 60 activities was selected and grouped under five areas of the vocational agriculture program. The program areas and the number of activities within each are as follows: Program Administration (18), Classroom Teaching (21), Advising the FFA (11), Occupational Experience Program (6), and Conducting an Adult Program (4). A mail questionnaire was used to collect data concerning the program areas and activities.

To evaluate the difficulty of each of the activities making up the five program areas a response scale of 1 to 99 was used. A scale value of one was used to indicate no difficulty, a scale value of 50 was used to indicate average difficulty, and a scale value of 99 was used to indicate that an activity was very difficult.

A list of Iowa schools having four year vocational agriculture programs was secured from the Iowa Department of Public Instruction. The list was stratified into four groups: (a) first-year teachers, (b) teachers who had taught two years, (c) teachers who had taught from three to five years and (d) teachers who had taught six years or more. Twenty-three names were drawn at random from each of the four groups. The first 15 names drawn from each group constituted the sample for the study with the remaining names used for substitution when necessary.

The stratified sampling procedure utilized 44.1% of the first-year teachers, 39.5% of the teachers who had taught two years, 21.7% of the teachers who had taught three to five years, and 9.5% of the teachers who had taught six years or more.

The data for this study were analyzed using the following statistical procedures:

1. Group means, standard deviations, and rankings;
2. Analysis of variance;
3. Guttman split-half test for reliability; and
4. Scheffe post hoc procedure.

Findings and Discussion

The 60 activities used in this study were grouped into five program areas. Reliability coefficients were computed as a part of

the data analysis for each of the five program areas and the overall questionnaire. The coefficients for the program areas were: program administration (.789), classroom teaching (.915), advising the FFA (.904), occupational experience program (.852), conducting an adult program (.784), and overall questionnaire (.942). All of the coefficients were above .60; therefore, item mean ratings were combined into a grand mean for each of the five program areas for the purpose of analysis.

Data presented in Table 1 reveal rankings, means, standard deviations, F-ratios, and the results of the Scheffe post hoc procedure for each of the five program areas and the overall questionnaire. The first-year teachers had the highest overall grand means scores. The grand mean scores declined as the level of experience increased among the four groups of teachers. The grand mean scores were found to be significantly different between the first-year teacher and the more than five year teacher groups. This finding suggests that teachers with more than five years of experience perceived themselves as having fewer problems in working with the vocational agriculture program when compared to the first-year teacher group.

The program area rated highest in level of difficulty by all four respondent groups was Conducting an Adult Program. The most difficult activity in this program area for both the first-year and second-year teachers was conducting a year-around adult program. This was the least difficult activity for three to five year teachers and over five year teachers. The most difficult activity for the three to five and the over five-year teachers was organizing a young farmer class.

The second most difficult program area for all four groups of teachers was the Occupational Experience Program. First-year and more than five year teachers indicated that the most difficult activity for them to complete in this program area was allowing time for supervised occupational experience program visitation. Second-year and three to five year teachers indicated that helping students develop a supervised occupational experience program was their most difficult activity.

In the program area entitled Classroom Teaching, a significantly different grand mean rating was observed between the first-year and the over five year teacher groups. The six activities giving first-year teachers the most problems were: teaching students with different ability levels, developing teaching materials, involving students in classroom activities, teaching students record keeping, preparing for classes, and arousing student interest. Of these six activities only one, teaching students with different ability levels, was identified as a problem for the more than five year teacher group.

A significant difference between the grand mean ratings was also observed for the Program Administration program area between

Table 1

Grand Mean Difficulty Ratings, Standard Deviations, Rankings, and F-ratios of Program Areas

| Program area | Teacher group | | | | Total N=60 | F-ratio (Pairs ^d) | p |
|---|---|--------------------------------|---|---------------------------------------|-------------------------|----------------------------------|------|
| | Group 1 first year n=15 | Group 2 second year n=15 | Group 3 three to five Years n=15 | Group 4 over five Years n=15 | | | |
| Conducting an adult program (4 activities) | 1 ^a $\frac{234.1^b}{61.9^c}$ | 1 $\frac{247.2}{53.6}$ | 1 $\frac{244.2}{85.3}$ | 1 $\frac{206.4}{75.8}$ | 1 $\frac{233.0}{70.3}$ | 1.05 | 3.77 |
| Occupational experience program (6 activities) | 2 $\frac{323.3}{127.8}$ | 2 $\frac{275.7}{89.9}$ | 2 $\frac{297.1}{120.0}$ | 2 $\frac{251.6}{127.6}$ | 2 $\frac{286.9}{117.4}$ | 1.02 | .393 |
| Classroom teaching (21 activities) | 3 $\frac{1076.5}{327.4}$ | 3 $\frac{956.0}{274.1}$ | 4 $\frac{810.9}{308.6}$ | 4 $\frac{773.1}{243.4}$ | 3 $\frac{904.2}{307.8}$ | 3.46* 1>4 | .022 |
| Program administration (18 activities) | 5 $\frac{883.2}{209.8}$ | 4 $\frac{785.7}{210.8}$ | 3 $\frac{771.9}{254.7}$ | 5 $\frac{615.2}{193.7}$ | 4 $\frac{764.0}{233.8}$ | 3.87* 1>4 | .014 |
| Advising the FFA (11 activities) | 4 $\frac{539.8}{206.6}$ | 5 $\frac{462.3}{152.1}$ | 5 $\frac{417.9}{179.4}$ | 3 $\frac{411.4}{138.7}$ | 5 $\frac{457.9}{174.6}$ | 1.79 | .160 |
| Grand mean score | $\frac{3056.9}{834.0}$ | $\frac{2726.0}{649.7}$ | $\frac{2542.0}{827.5}$ | $\frac{2257.7}{661.9}$ | $\frac{2645.9}{785.7}$ | 3.01* 1>4 | .038 |

*Significant at the .05 level

a = Rank

b = Mean

c = Standard deviation

d = Scheffe's procedure at .10 level of significance

the first-year and the over five year teacher groups. The three activities rated highest in level of difficulty by the first-year teachers were: developing a filing system, setting up a five year plan, and completing needed paper work for vocational agriculture programs. None of these three activities were rated as a source of problems for the more than five year teacher group.

Of the five program areas studied, Advising the FFA was rated lowest overall as a source of problems. The activity rated highest in level of difficulty by all four groups of teachers was motivating FFA committees to function. Three other activities causing moderate problems for first-year teachers were: training FFA officers effectively, preparing FFA members for contests, and integrating FFA activities with the total program.

Conclusions and Recommendations

In general, each group of teachers tended to respond to the program activities similarly. Those activities and program areas ranked high by one group of teachers tended to be ranked high by the other groups. The teacher group that tended to respond differently most often was the first-year teachers. This suggests that experience in teaching tends to make the occupation less difficult. It was evident that in most cases as the number of years of experience increased, the difficulty of activities undertaken by the vocational agriculture teacher decreased.

Based on the findings of this study, the following conclusions and recommendations are presented as partial solutions for improving vocational agriculture teacher preservice and inservice education programs to better prepare teachers for the difficulties of this profession.

1. The emphasis placed on preparing prospective teachers at the state and university levels to conduct adult education programs should be examined. This program area was found to be the most difficult for all teachers regardless of experience. A study of this program area needs to be made in an effort to provide possible solutions to this complex problem.

2. The program area entitled Occupational Experience Programs was ranked second most difficult by all four groups of teachers. The two most difficult activities in this program area were keeping project record books and allowing time for supervised occupational experience program visitation.

The data do not suggest the reasons why keeping project record books is such a difficult activity. Further study needs to be conducted to determine causes and possible solutions. Since all four groups of teachers have problems with this activity it seems appropriate to address this issue in teacher inservice programs as well as preservice.

The difficulty teachers have in finding time for supervised occupational experience program visitation appears to be a problem of time management. This topic could be addressed in preservice and inservice programs so that teachers can learn to manage their time more efficiently.

3. First-year teachers face a greater level of difficulty in the area of classroom teaching when compared to more experienced teachers. This finding may be expected due to the teachers' lack of experience; however the individual activities which contributed to the difficulty rating of this area need to be examined. There are several implications to be found in this area for preservice and inservice programs. Both preservice and inservice programs should include the study of ways to teach students with different ability levels. Teachers and prospective teachers need to learn how to utilize the many technical materials and publications available to develop teaching materials for the classroom. In addition, preservice and inservice programs should emphasize ways to make learning "student centered" and how to gain and hold students' interest in technical subject matter.

4. First-year teachers expressed a moderate level of difficulty with Program Administration. An improvement in this area was observed as the number of years of experience increased. This observation suggests that program administration should be addressed more fully at the preservice level in an effort to reduce the problems faced by first-year teachers in this area. Three activities which should be emphasized at the preservice level are developing a filing system, setting up a five-year plan for the department, and completing needed paper work for vocational agriculture programs.

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