

An Assessment of the Organizational and Instructional
Difficulties Associated with Job Tasks of Indiana
Vocational Agriculture Instructors

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The rapid rate of change in both agricultural technology and the world of work continues to make the vocational agriculture instructor's job challenging. Vocational agriculture instructors must complete many tasks which extend well past normal school hours. Instructors strive to build programs that not only meet the needs of secondary students but also serve young/adult farmers, agribusiness people, school administrators, and the community as a whole. Lockwood (1976) stated that more and more demands are made on vocational agriculture instructors' time.

Several studies such as Dillon (1977), Moore and Camp (1979), and Goode and Stewart (1981) have found that a large amount of time is demanded from vocational agriculture instructors. In an Indiana study conducted by Moore and Camp (1979), it was found that in 11 out of 27 studies from 1940 to 1978, time demand was a factor influencing teachers to leave the teaching profession. The job of a vocational agriculture instructor is not an easy one. On a daily basis the instructor is faced with many problems and concerns.

A need exists to identify specific areas of job difficulties and tasks involved in teaching vocational agriculture at the secondary level. Teacher educators are concerned with determining the problem areas that vocational agriculture instructors face. When these problems are identified, changes can then be made to better prepare prospective teachers for the teaching profession and additional steps can be taken to improve inservice programs.

Purpose of the Study

The purpose of this study was to identify organizational and instructional problems in the vocational agriculture program as perceived by vocational agriculture instructors in Indiana. The specific objectives were to:

1. Determine the level of difficulty associated with 99 task items in the vocational agriculture program.

2. Determine the relationship between teacher ratings of task areas and teaching experience, farming experience, previous high school experience in vocational agriculture and FFA, and vocational agriculture enrollment.
3. Make recommendations concerning preservice and inservice teacher education programs to better prepare prospective teachers, and to assist practicing teachers of vocational agriculture.

Methods and Procedures

The questionnaire used for the study consisted of two parts. Part I asked vocational agriculture instructors to indicate on a nine-point scale (1 = no difficulty, 4.50 = moderate difficulty, 9 = extreme difficulty), the response which best indicated how difficult each task item was for them to accomplish. The task items in the instrument were drawn from a review of literature. These task items were divided into six areas: administration of vocational agriculture programs, classroom and laboratory instruction, Supervised Occupational Experience Program (SOEP), Future Farmers of America (FFA) activities, adult programs, and young farmer programs. Part II of the questionnaire asked instructors to provide information about themselves and their programs.

The instrument was reviewed for conciseness, clarity, and validity by agricultural education faculty members at Purdue University and by agricultural education faculty and graduate students at Iowa State University. It was also pilot tested by six Iowa vocational agriculture instructors.

The population of the study consisted of all 276 secondary vocational agriculture instructors teaching in Indiana during the 1983 school year. A random sample of 152 (55%) instructors was asked to participate in the study.

A cover letter, questionnaire, and self-addressed stamped envelope were sent to the sample of instructors. Two follow-up mailings were completed to encourage participation in the study. A total of 124 usable questionnaires were returned for a response rate of 81.5%. Eight nonrespondents were randomly selected for a telephone follow-up consisting of 16 randomly selected questions. Using a *t*-Test, it was determined that only one significant difference existed between the respondents and the nonrespondents. A significantly greater number of nonrespondents were teaching in multiple teacher departments.

The Statistical Package for the Social Sciences (Nie, Hull, Jenkins, Steinbrenner, & Bent, 1983) was used for all analyses. Cronbach's Alpha coefficient was used as a part of the data analysis to determine if the 99 job task items could be grouped into six task ar-

eas. The coefficients for each task area were all .92 or above indicating that the items within each of the areas were consistent and closely related. The Cronbach Alpha coefficient for the combined task areas was .99.

Findings

The overall ratings of the six task areas are shown in table 1. None of the mean ratings were above the midpoint (4.50) of the scale. The highest mean rating was 4.35 for the area of adult programs. Although this finding suggests that there was no single area of the vocational agriculture program which presented major difficulty for the instructors, the examination of the difficulty ratings gave insight to the perceived job difficulties of the instructors.

Table 1

Perceived Level of Difficulty for Six Task Areas in the Vocational Agriculture Program

Rank task area	\bar{X}	SD
1. Adult programs	4.35	1.85
2. Supervised Occupational Experience Programs	4.17	1.55
3. Young farmer programs	3.91	1.85
4. Administration of vocational agriculture programs	3.90	1.31
5. Classroom and laboratory instruction	3.72	1.23
6. Future Farmers of America activities	3.50	1.13

Listed in Table 2, under the appropriate task area, are the individual task items rated moderately difficult or above. There were 27 task items with a mean rating of at least 4.50.

As illustrated in Table 2, seven tasks in the area of adult programs were rated at moderately difficult to above. These tasks included advising adults, recruitment, and identifying subject matter for adult classes. Studies conducted by Scheid (1982) in Iowa and King (1984) in Georgia also reported that the area of adult farmers presented difficulties for instructors.

The six most difficult tasks in the area of Supervised Occupational Experience Programs are presented in Table 2. Making SOE visits on a year-round basis was rated by vocational agriculture instructors as having the highest degree of difficulty in this area. Other problems involved planning, conducting, supervising, and evaluating Supervised Occupational Experience Programs.

Table 2

*Task Items Rated Moderately Difficult (4.50) or Above by
Indiana Vocational Agriculture Instructors*

Task area and items	\bar{X}	SD
Adult Programs:		
Advising an adult with personal farming matters	5.26	2.28
Recruiting and determining enrollment in adult classes	5.00	2.12
Identifying subject matter areas of adult classes	4.93	2.11
Developing learning activities for adult classes	4.75	1.91
Planning demonstrations, tours, panels, and/or quest speakers for adult classes	4.69	2.14
Developing news items, circular letters and other means of informing the community of adult classes	4.63	2.18
Identifying and securing up-to-date information on current topics and concerns for adult classes	4.54	1.88
Supervised Occupational Experience Programs:		
Conducting SOE on-site instruction on a year-round basis	5.27	2.28
Conducting field trips and project tours to students' SOE programs	4.90	2.11
Completing a follow-up of all SOE programs	4.83	2.12
Working with employers and parents in planning, conducting, and evaluating SOE programs	4.72	1.87
Providing effective on-site instruction related to students' SOEP	4.64	1.87
Requiring participation in SOE by all students	4.53	2.56
Young farmer programs:		
Advising a young farmer with personal farming matters	4.73	2.28
Recruiting and determining enrollment in young farmer classes	4.67	2.16
Organizing an advisory committee to assist in the decision making process for young farmer programs	4.50	2.19
Administration of vocational agriculture programs:		
Completing follow-up activities on vocational agriculture graduates	5.31	2.23
Visiting all prospective students and their parents	5.13	2.21
Organizing and developing a filing system	4.73	2.30
Involving alumni, local farmers, and agribusiness people in special class topics	4.62	2.00
Developing a program for student recruitment	4.58	1.90
Classroom and laboratory instruction:		
Implementing computerized instruction into the total vocational agriculture program	5.48	2.10
Developing individualized educational programs for disabled/handicapped students	5.29	2.47
Teaching students with different ability levels	4.78	2.15
Recognizing and working with students with learning disabilities	4.66	2.02

Table 2 (continued)

Task Area and items	X	SD
Future Farmers of America Activities:		
Advising FFA alumni group(s)	4.77	2.36
Utilizing community resource people to assist in training judging teams	4.72	2.10

The tasks rated most difficult in the area of young farmer programs are shown in Table 2. These tasks included advising a young farmer with personal farming matters, recruitment of young farmers, and organizing an advisory committee.

The five tasks rated most difficult in the area of administration of vocational agriculture programs are listed in Table 2. They involve completing follow-up activities, visiting prospective students, and organizing and developing a filing system.

In the area of classroom and laboratory instruction, the four tasks rated most difficult dealt with implementing computer assisted instruction into the vocational agriculture program, developing individualized educational programs for disabled/handicapped students, teaching students with different ability levels, and recognizing and working with students who have learning disabilities.

Future Farmers of America activities had the fewest number of tasks listed as moderately difficult or above. As shown in Table 2, the two tasks rated most difficult in this area were advising FFA alumni groups and utilizing community resource people to coach individual judging teams.

The relationship between the difficulty ratings of each of the six task areas and years of teaching experience, years of farming experiences, years enrolled in vocational agriculture when in high school, years membership in the FFA, and number of students enrolled in vocational agriculture are shown in Table 3. None of the relationships were very strong, even though several were statistically significant at the .05 level. It was concluded that none of the variables examined in the study were closely related to the instructors' ratings of the six task areas.

Table 3

Relationships Between Selected Variables and Instructors' Ratings of the Six Task Areas

Task area	Selected Variables				
	Years of teaching	Years of farming	Years in Vo-Ag	Years in FFA	Number of students
Adult programs	-.238*	-.330**	.103	.129	-.323**
SOEP	-.043	.057	.044	-.105	-.061
Young Farmer Programs	-.065	-.431**	.055	-.001	-.272*
Administration of Vo Ag Programs	-.123	-.112	.187	.035	-.204*
Classroom & Lab Instruction	-.109	-.044	.160	.080	-.199*
Future Farmers of America Activities	-.133	-.101	.188	-.088	-.130

Note. Relationships determined by Pearson Product-Moment Correlation Coefficient (Pearson r)
* $p < .05$, ** $p < .001$

Recommendations

The findings of this study identified several perceived difficulties involved in teaching vocational agriculture at the secondary level in Indiana. Based on the findings of the study the following recommendations may be of value to teacher educators in examining and evaluating preservice and inservice education programs:

1. The results of the study revealed that most of the difficulties in the areas of adult and young farmer programs are associated with teaching techniques and methodology, and promoting adult programs and/or young farmer programs. These findings are supported by similar studies (Scheid, 1982 and King, 1984) conducted in other states. Teacher preservice and inservice programs should be strengthened to address these areas.
2. The Supervised Occupational Experience Program is a source of difficulties for many instructors. Preservice and inservice programs need to stress effective methods and alternatives for planning and conducting effective SOE programs. Special emphasis needs to be given to on-site instruction.

3. Three of the four most difficult tasks in the program area of classroom and laboratory instruction were related to working with students who have special needs. These difficulties should be addressed at both the preservice and inservice levels.
4. None of the variables selected in this study were closely related to the ratings of the instructors. This finding suggests that teacher educators should not be overly concerned about working with instructors from different backgrounds and experiences when planning preservice and inservice educational programs.

References

- Dillion, R. D. (1977). An analysis of selected factors influencing use of time by forty vocational agriculture instructors in Nebraska. *The Journal of the American Association of Teacher Educators in Agriculture*, 18(1), 9-15.
- Goode, J. K., & Stewart, B. R. (1981). Priorities of Missouri teachers of vocational agriculture regarding teaching, civic, church, family, and self-related activities. *The Journal of the American Association of Teacher Educators in Agriculture*, 22(2), 36-41.
- King, D. W. (1984). *Problems and Concerns of Vocational Agriculture Teachers in Georgia*. Unpublished master's thesis, Iowa State University, Ames.
- Lockwood, L. (1976). What are your priorities in your job? *Agricultural Education Magazine*, 48(11), 248-249.
- Moore, G. E., & Camp, W. G. (1979). A comparison of perceptions. *The Journal of the American Association of Teacher Educators in Agriculture*, 20(3), 11-18.
- Nie, N. H., Hull, C. H, Jenkins, J. G., Steinbrenner, K., & Bent, D. H. (1983). *Statistical Package for the Social Sciences*. 2nd Edition. New York: McGraw-Hill Book Company.
- Scheid, C. L. (1982). *Organizational and instructional problems of selected Iowa Teachers of vocational agriculture*. Unpublished master's thesis, Iowa State University, Ames.