

Cooperation Between North Dakota Secondary Vocational Agriculture Teachers and County Agents in Carrying Out Selected Activities and Programs

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Accepted for Publication May 1985

Introduction

Each year North Dakota county agents and secondary vocational agriculture teachers carry out a number of programs and activities to fulfill needs and interests of their respective clients. They may be working together to conduct some programs or activities; while for others, cooperation may not be of benefit. Although the Cooperative Extension Service and public schools work for the betterment of agriculture, it is doubtful that one agency alone can be effective in meeting all the needs and interests of all people. A professional partnership of efforts between the two agencies becomes a real challenge. Cooperation is necessary in terms of avoiding duplication.

Smith and Hull (1966) found that the best interaction between vocational agriculture instructors and county agents occurred when activities were related to planning and conducting meetings. They pointed out that utilizing each other's special abilities in problem situations, combining field days with project demonstrations, and having committees discuss community needs in adult agricultural education are factors or activities that would enhance cooperation.

Anderson (1979) examined reasons that limited cooperation between county extension agents and vocational agriculture teachers. He found that county agents as resource persons were under-utilized by vocational agriculture teachers. This was attributed to lack of awareness.

A study in Michigan (Omar, 1964) revealed that personal characteristics of county agents such as age, college degrees and length of experience, and their opinions with regard to the desirability of having vocational agriculture instructors and county agents serve on each other's advisory committee were interrelated. County agents above 35 years old with advanced college degrees and more work experience were more willing than others to serve on the vocational agriculture teacher's committee.

Purpose and Objectives

The major purpose of this study was to determine the extent of cooperation between North Dakota secondary vocational agriculture teachers and county agents in carrying out selected activities and programs.

The specific objectives of this study were:

1. To determine the extent to which secondary vocational agriculture teachers and county agents cooperate in carrying out selected activities and programs.

2. To determine factors that enhance cooperation between secondary vocational agriculture teachers and county agents in carrying out selected activities and programs.

3. To determine factors that inhibit the extent of cooperation between secondary vocational agriculture teachers and county agents in carrying out selected activities and programs.

4. To compare the factors that enhance or inhibit cooperation between vocational agriculture teachers and county agents in carrying out selected activities and programs as reported by the two groups.

Procedures

Population and Sample

The population groups of this study were defined as all secondary vocational agriculture teachers and county extension agricultural and 4-H agents in North Dakota during the 1982-1983 school year. There were 94 secondary vocational agriculture teachers and 67 county agents.

A sampling procedure used by the researcher required that only counties with a county extension office and at least one vocational agriculture department were chosen for the study. This criterion automatically eliminated 7 of 53 counties of North Dakota. In the case of multiteacher departments, one secondary vocational agriculture teacher within the department was randomly selected. The sample consisted of 82 secondary vocational agriculture teachers and 59 county agents.

Instrumentation

A survey questionnaire was developed based on information gained from a literature review and with the assistance of leaders from the Cooperative Extension Service. The questionnaire was pilot tested for validity using secondary vocational agriculture teachers and county agents from Becker, Clay and Norman Counties in Minnesota.

The questionnaire included three parts. The first part dealt with the background characteristics of respondents. In the second part, respondents were asked to report the number of times cooperation occurred during the past 12 months in carrying out selected activities and programs. In the third part, respondents were requested to rate the effect of selected factors on their cooperative efforts by using a five-point scale.

Data Collection

In May, 1983, a survey questionnaire was mailed along with a cover letter and a self-addressed stamped envelope to the county agents and secondary vocational agriculture teachers selected for the study. Prior to the mailing of the questionnaire to the county agents, the Cooperative Extension Service sent a letter alerting county agents to the forthcoming questionnaire and asking for their cooperation in participating in the study. County extension agents who did not respond to the first questionnaire were sent another three weeks later. The vocational agriculture teachers who did not respond were contacted during the North Dakota State FFA Convention. They were provided another copy and asked to complete the questionnaire and return it to the researcher or the Department of Agricultural Education during that week. Non-respondents were then contacted by telephone asking them to complete the questionnaire. These procedures resulted in a total response of 95.1% for secondary vocational agriculture teachers and 94.9% for county extension agents.

The researcher compared responses of early and late respondents and found there was not an appreciable difference between the responses. Therefore, generalizations could be made to the entire population.

Data Analysis

Data collected were analyzed using descriptive statistics. Average numbers of times cooperation occurred were computed and reported. Mean scores and standard deviations were calculated in analyzing data pertaining to the effect of selected factors on cooperation. In addition Chi Square was used to test differences of opinions between the two groups.

Results

Extent of Cooperation

Table 1 reveals that cooperation between secondary vocational agriculture teachers and county agents occurred most often when working with crop production or crop enterprise activities. Cooperation occurred most often when working with FFA or 4-H activities in the crops and livestock areas. However, in agricultural mechanics, county agents reported FFA and 4-H activities as being the benefactor of most cooperation, while vocational agriculture teachers reported adult classes and activities as the area in which most cooperation occurred. In the category of farm management, county agents again reported FFA and 4-H activities receiving high cooperation, while vocational agriculture teachers reported county agents assisting with high school classes in farm management as receiving more cooperative efforts. Under the category of youth activities, judging activities such as crops and livestock received the greatest amount of cooperation. County agents and vocational agriculture teachers appeared to cooperate most often in other activities that dealt with fairs and shows.

Table 1 also reveals that vocational agriculture teachers generally reported a higher degree of cooperation than did county agents. This is perhaps because of the service nature of the job of the county extension agent. It was also indicated that county agents provide more services to vocational agriculture teachers than vocational agriculture teachers provide to county agents.

Influence of Selected Factors Affecting Cooperation

Sixteen factors were selected which may affect working relationships between county extension agents and secondary vocational agriculture teachers. Both groups were asked to indicate the effect of these factors with a score of five being extreme positive influence and one being extreme negative influence.

Table 2 reveals that only 4 of the 16 factors had a neutral or a slightly negative influence on the cooperative efforts between the two groups. Those four items included difference of age, long distance (greater than 20 miles) between school and county extension office, time conflicts in getting together for cooperative efforts and lack of clarity of functions. County agents tended to rate the factors more positively than did secondary vocational agriculture teachers. Both groups reported short distance (20 miles or less) between schools and county extension office as a factor having the most positive effect on their cooperation, and long distance (more than 20 miles) between schools and county extension office as the most negative factor affecting their cooperation.

Table 1

Average Number of Times Cooperation Occurs Between County Agents and Secondary Vocational Agriculture Teachers During a Twelve Month Period

Kind of Activity/Event	Teachers Providing Service to County Agents		County Agents Providing Services to Teachers	
	County Agents Reporting	Vo-Ag Teachers Reporting	County Agents Reporting	Vo-Ag Teachers Reporting
<u>Crop</u>				
1. High school classes	0.44	2.47	3.01	5.09
2. Adult classes and/or activities	0.80	2.20	1.86	1.85
3. FFA or 4-H activities	3.60	6.36	4.96	5.96
<u>Livestock</u>				
1. High school classes	0.31	2.55	2.29	2.80
2. Adult classes and/or activities	0.49	1.57	0.96	1.72
3. FFA or 4-H activities	3.78	5.78	6.32	5.53
<u>Agricultural Mechanics</u>				
1. High school classes	0.23	1.12	1.03	1.17
2. Adult classes and/or activities	0.38	1.67	1.09	1.58
3. FFA or 4-H activities	0.61	1.18	1.44	0.85
<u>Farm Management</u>				
1. High school classes	0.32	0.19	1.24	1.76
2. Adult classes and/or activities	1.16	0.71	1.10	0.88
3. FFA or 4-H activities	1.31	0.59	2.57	0.19
<u>Youth Activities</u>				
1. Leadership development	1.23	1.17	1.71	0.54
2. Judging activities (crops, livestock)	5.31	9.48	6.02	8.82
3. Contests (speech, demonstrations)	0.64	1.11	0.76	0.93
<u>Others</u>				
1. Field days	0.22	0.78	0.40	1.14
2. Tours	0.18	0.56	0.68	0.77
3. Demonstration plots	0.19	0.19	0.67	0.52
4. Fairs and shows	2.54	4.20	3.70	4.17
5. Community development/service	0.36	0.55	0.82	0.79
6. Advisory council	0.19	0.73	0.68	0.95

Comparison of Factors Affecting Cooperation

Comparison was made using Chi-Square to determine if differences occurred between the way county extension agents and vocational agriculture teachers responded to the 16 factors affecting their cooperation.

Table 2

Influence of Selected Factors Effecting Cooperation Between Secondary Vocational Agriculture Teachers and County Agents

Factors	Vocational Agriculture Teacher Response		County Agent Response		Chi Square
	Mean ^a	SD	Mean ^a	SD	
Short distance (20 miles or less) between schools and county extension office	3.84	1.13	3.78	0.66	17.432*
Initiative in contacting one another	3.46	0.99	3.46	0.82	3.447
Degree of informal relations (e.g., personal friendships)	3.44	0.92	3.61	0.65	8.708
Serving the same people (youth) in the same subject matter-agriculture	3.44	0.95	3.14	0.96	3.470
Similarity of age	3.39	0.63	3.49	0.63	1.773
Discussing factors affecting success or failure of educational programs in agriculture within the county	3.37	0.65	3.61	0.62	6.624
Recognition or credit received from one another for past or current services rendered to FFA or 4-H Clubs	3.25	0.75	3.39	0.70	2.277
Tenure in present location	3.17	0.75	3.27	0.75	3.300
Variation in formal education (e.g., college degree received)	3.14	0.62	3.12	0.43	4.471
Recognition received from clients	3.11	0.64	3.27	0.52	2.981
Relationships between school administrators (principals, superintendents) and the county extension chairman	3.10	0.74	3.57	0.76	16.371*
Variation in total years experience as a vocational agriculture teacher or a county extension agent	3.07	0.64	3.32	0.69	5.596
Difference of age	2.95	0.43	2.96	0.50	0.724
Time conflicts in getting together for cooperative efforts	2.71	0.85	2.57	1.06	17.291*
Lack of clarity of functions	2.71	0.72	2.64	0.75	5.187
Long distance (greater than 20 miles) between schools and county extension office	2.41	0.97	2.40	0.63	10.321**

^a5 = Extreme Positive Influence; 4 = Positive Influence; 3 = Neither Positive Nor Negative Influence; 2 = Negative Influence; 1 = Extreme Negative Influence.

*p < .01. **p < .05.

Table 2 indicates those Chi-Square values. A significant difference of opinion between the two groups was found in only 4 of the 16 items included in the study. These were: (a) short distance (20 miles or less) between school and county extension office; (b) long distance (greater than 20 miles) between school and county extension office; (c) relationships between school administrators (principals and superintendents) and the county extension chairman; and (d) time conflicts in getting together for cooperative efforts.

Conclusions

The following conclusions were based upon the findings of this study:

1. County extension agents provide more services to vocational teachers than do vocational agriculture teachers to county agents. The cooperation tended to be greater if the activities were related to 4-H or FFA activities and fairs and shows. A lesser degree of cooperation occurs in activities related to teaching high school classes in crops, livestock, agricultural mechanics and farm management.

2. Most factors have at least a slight positive effect on the degree of cooperation between secondary vocational agriculture teachers and county extension agents. Vocational agriculture teachers and county extension agents that have fewer than 20 miles between the school and the county extension office, are similar in age and are good personal friends will have a closer working relationship and will cooperate with each other more often.

3. A lesser amount of cooperation will occur between county extension agents and vocational agriculture teachers if the school and the county extension office are more than 20 miles apart, if there are conflicts in times when they can get together, if there is a lack of understanding of each other's functions, and a difference of age.

Implications

The results and conclusions reported in this study have implications for everyone providing pre-service and in-service education in agricultural and extension education. Vocational agriculture teachers and county extension agents need to be made more aware of the functions of each other's job. They need to be encouraged to make wise use of each other's resources, and to cooperate in carrying out activities which are similar in meeting the needs of their respective clientele. Some demographic and geographic factors may hinder cooperation between the two groups to some extent. It is up to vocational agriculture teachers and county agents as individuals to make an effort to cooperate and compliment each other in carrying out programs in their communities and counties.

References

- Anderson, E. (1979, September). The Cooperative Extension Service, a resource for the vocational agriculture instructor. The Agricultural Education Magazine, 52(3), 55, 59.
- Omar, A. M. M. (1964). Working relationships of county extension agents and teachers of vocational agriculture in Michigan. Dissertation Abstracts, 25, 2.
- Smith, W. L., & Hull, W. L. (1966). An examination of the cooperative attitude between vocational agriculture instructors and county agents in planning and conducting instructional programs in Oklahoma (Research Bulletin No. 7). Stillwater: Oklahoma State University, Department of Agricultural Education, Vocational Research Coordinating Unit.