

# Priorities of First and Second Year Teachers of Agriculture in Missouri

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The priorities which agriculture teachers set for the use of their time have been studied by agricultural educators. Studies have also been conducted which revealed that the use of time was related to why teachers leave the profession. Coggin (1953), Goode and Stewart (1981), Hicks (1937), Iverson and McGuire (1977), and Lockwood (1976) have cited the use of time by teachers as a major professional concern. Lockwood, Iverson and McGuire, and Goode and Stewart used similar instruments to ascertain priorities for the use of time by teachers of agriculture. The instruments included items related to personal and community activities as well as professional activities of teachers. The situation has evidently not changed since Lockwood (1976) stated:

We seem to make more demands on instructor's time every year. In Iowa during the last 18 years, we have added at least eight new time-consuming activities in our vocational agriculture departments.. A beginning teacher is faced with the very frustrating task of deciding what he will be forced to leave undone (p. 249).

Recent studies designed to follow-up teachers who left the profession have found that time was a major concern. Moore and Camp (1979) found that long hours was the primary reason given by teachers for leaving teaching. Knight (1978) reported that time related concerns ranked second as the reason teachers left teaching in Ohio. In a related study, Birkenholz (1986) reported that agricultural education graduates employed as secondary agriculture teachers worked more hours per week than did agricultural education graduates who entered non-teaching occupations.

Richardson, Shinn, and Stewart (1977) identified the shortage of secondary agriculture teachers as a major concern of the profession. The high rate of teacher turnover is one cause of this problem. Bryant (1980) in a study of North Carolina State University agricultural education graduates, found that only 26% of the 338 students who graduated between 1962 and 1977 were still teaching agriculture in 1978. Turnover is especially severe among beginning agriculture teachers. Ohio researchers (Wardlow, Barrick, and Warmbrod, 1985) found that 24% of all teachers who leave the profession do so after one year of teaching.

The University of Missouri-Columbia has conducted inservice programs for first and second year agriculture teachers for several years. The primary purpose of the program has been to help first and second year teachers become established as successful members of the profession. Therefore, it was felt that more effective inservice programs could be planned if data relating to the priorities of first and second year Missouri agriculture teachers were available.

## Problem Statement

Setting priorities for the use of time is a problem for professionals in many areas, including teachers of agriculture. Previous studies have

examined priorities of experienced teachers of agriculture and reasons that teachers leave the field. However, little data were available that related specifically to the priorities of new teachers. Therefore, the focal point for this study was to provide information concerning the priorities of first and second year teachers of agriculture.

#### Purpose

This study was designed to replicate research reported by Goode and Stewart (1981). The purpose was to ascertain the priorities which beginning (first and second year) agriculture teachers place on selected civic, self, family, and teaching-related activities. A secondary purpose was to ascertain if differences existed between the priorities of first and second year Missouri agriculture teachers in 1986 and the priorities of Missouri agriculture teachers in 1979 as established by Goode and Stewart (1981). The following research hypotheses were tested at the .05 alpha level.

1. There are significant differences among the priority ratings given to the activities by the 1986 beginning (first and second year) agriculture teachers in Missouri.
2. There is a significant positive relationship between the rankings of the priorities of the 1986 beginning (first and second year) Missouri agriculture teachers and the rankings of the teachers surveyed in 1979.

#### Methods and Techniques

The population included all Missouri secondary agriculture instructors who were in their first or second year of teaching in the fall of 1986 ( $N = 35$ ). Data for the comparison group were obtained from the 1979 study of Missouri secondary agriculture teachers (Goode and Stewart, 1981). The population frame for the comparison group included all Missouri secondary agriculture teachers employed during the fall of 1979 ( $N = 342$ ). Of the total population, 242 (71%) were surveyed and 90X ( $N = 217$ ) provided usable responses.

Data were collected using an instrument designed by Lockwood (1976) and modified by Goode and Stewart (1981). The instrument used a 0 to 4 (0 = least important; 4 = most important) Likert-type scale to determine the importance agriculture teachers placed on 35 professional, civic, church, family, and self-related activities. Each teacher was provided with 70 markers to distribute among the 35 activities. For example, teachers were required to use four markers to rate an activity as "most important" while no markers were required to rate an activity as "least important". This provision of a limited number of markers simulated reality by forcing teachers to choose among activities which compete for a finite amount of teacher time.

Goode and Stewart (1981) tested the revised instrument and reported a test-retest reliability coefficient of .94. A panel of faculty members in Agricultural Education examined the revised instrument and judged it to be valid. The revised instrument was administered to first and second year teachers at a workshop held during the fall of 1986. All participants ( $N = 35$ ) completed the instrument and 34 (97X) left usable responses.

Analysis of variance (ANOVA) procedures followed by the Duncan's multiple range test was utilized to test the first hypothesis. Inferential statistics were utilized to test the first hypothesis based on the assumption that the respondents constituted a time-place sample representative of past, present, and, to a limited degree, future generations of Missouri first and second year agriculture teachers. The second hypothesis was tested by arranging both sets of data into ranks and computing a Spearman Rho correlation coefficient. The resulting correlation coefficient was tested for significance (Ferguson, 1981).

### Findings

ANOVA procedure (see Table 1), utilized to test hypothesis 1, yielded an **F** value of 18.26 (df = 34, 1155; **p** < .05). On a 0 to 4 scale, the means ranged from 3.5 for teaching local day classes to 0.7 for working with the local Young Farmer Association. Table 2 lists the mean for each of the 35 activities and identifies significant differences among the means as established by the Duncan multiple range test. Means which have different letters beside them were significantly different. Research hypothesis 1 was supported by the data.

Table 1

ANOVA Test for Difference Among Ratings of Activities by First and Second Year Teachers

Source	<b>SS</b>	<b>df</b>	<b>MS</b>	<b>F</b>	<b>p</b>
Model	<b>552.987</b>	<b>34</b>	<b>16.264</b>	<b>18.26</b>	.0001
Error	<b>1029.000</b>	<b>1155</b>	<b>0.891</b>		
Total	<b>1581.987</b>	1189			

**Note:**  $R^2 = 0.35$

Teaching local day classes (3.5) was rated significantly higher than all other activities except FFA activities on the local level (3.18). Conducting SOEP production and placement programs (2.88) was rated third while working with SOEP records (2.82) was rated fourth. Three activities received mean ratings of less than 1.00. Visits to Adult/Young Farmer class members (0.97). professional organizations outside of vocational education (0.88). and working with the Young Farmer Association (0.76) were the three lowest rated activities.

The rankings of the activities of the 1986 first and second year Missouri agriculture teachers were compared with the rankings of the agriculture teachers surveyed in 1979 (Goode and Stewart, 1981) and are reported in Table 3. The calculated Spearman Rho correlation coefficient was .91 ( $p < .05$ ;  $df = 33$ ). Research hypothesis 2 was supported by the data. Both the first and second year teachers and the teachers surveyed in 1979 (Goode and Stewart, 1981) assigned the highest priority to teaching local day classes followed in order by FFA activities on the local level, SOEP production and placement programs, and SOEP records. However, the 1986 first and second year teachers placed less importance on Adult/Young Farmer activities than did the teachers surveyed in 1979.

Table 2

Means, Rankings, and Significant Differences Among Activities as Rated by Beginning Teachers

Rank	Activity	Mean	SD
1	Teaching local day classes	3.50	a
2	FFA activities on local level	3.18	ab
3	SOEP (prod and placement programs)	2.88	bc
4	SOEP records	2.82	bcd
5	Family life on weekends	2.73	cde
6	FFA activities past local level	2.65	cde
7	Vo Ag contests	2.56	cdef
8T	Daily family life	2.53	cdefg
8T	Paper work required locally	2.53	cdefg
8T	Teach calendars, course of study, etc.	2.53	cdefg
11	Classes, workshops, prof. development	2.44	cdefgh
12	Exhibiting projects	2.38	cdefgh
13	Paperwork required above local level	2.35	cdefgh
14T	Keeping current in agriculture	2.32	defgh
14T	Visits to potential vo ag students	2.32	defgh
16	Neatness and organization	2.26	efgh
17	Effective PR program	2.23	efgh
18	Personal leisure time	2.03	fghi
19	Participation in vo ed organizations	2.00	ghij
20	Local vo ag advisory council	1.94	hijk
21T	Plan and conduct field trips	1.70	ijkl
21T	Visiting with others	1.70	ijkl
23	Support all school activities	1.59	ijklm
24	Participation in church activities	1.53	ijklm
25	Having a nice home	1.50	jklmn
26	Coordination with other agencies	1.47	klen
27	Second source of income	1.38	lmno
28	Adult and young farmer classes	1.32	lmno
29	Local school duties	1.26	lmnop
30T	Participation in civic organizations	1.24	lmnop
30T	Local FFA Alumni Association	1.24	lmnop
32	Willingly help anyone at anytime	1.12	mnop
33	Visits to adult/YF class members	0.97	nop
34	Prof organizations outside of vo ed	0.88	op
35	The Young Farmer Association	0.76	p

Note: N = 34 teachers.

\*Means followed by different letters are significantly different (p < .05) by the Duncan Multiple Range Test.

Table 3

Means and Rankings Among Activities as Rated by Teachers in 1979 and 1986

Rank	Activity		Mean	
	'86	'79	'86	'79
1	1	Teach local day classes	3.50	3.70
2	2	FFA activities on local level	3.18	3.17
3	3	SOEP (prod and placement programs)	2.88	3.13
4	4	SOEP records	2.82	2.83

(table continues)

5	9	Family life on weekends	2.73	2.47
6	11	FFA activities past local level	2.65	2.41
7	7T	Vo Ag contests	2.56	2.48
8T	6	Daily family life	2.53	2.52
8T	13	Paper work required locally	2.53	2.31
8T	5	Teach calendars, course of study, etc.	2.53	2.55
11	7T	Classes, workshops, prof develop	2.44	2.48
12	16	Exhibiting projects	2.38	2.07
13	17	Paperwork required above local level	2.35	2.06
14T	12	Keeping current in agriculture	2.32	2.34
14T	24T	Visits to potential vo ag students	2.32	1.77
16	14	Neatness and organization	2.26	2.27
17	10	Effective PR program	2.23	2.46
18	15	Personal leisure time	2.03	2.08
19	19	Participation in vo ed organ	2.00	1.94
20	26	Local vo ag advisory council	1.94	1.66
21T	24T	Plan and conduct field trips	1.70	1.77
21T	22T	Visiting with others	1.70	1.81
23	30	Support all school activities	1.59	1.23
24	22T	Participate in church activities	1.53	1.81
25	18	Having a nice home	1.50	1.97
26	27	Coord. with other agencies	1.47	1.47
27	20	Second source of income	1.38	1.90
28	21	Adult and young farmer classes	1.32	1.87
29	32	Local school duties	1.26	1.05
30T	31	Participate in civic organ	1.24	1.11
30T	35	Local FFA Alumni Association	1.24	0.72
32	34	Willingly help anyone at anytime	1.11	0.73
33	29	Visits to adult/YF class members	0.97	1.46
34	33	Prof organ outside of vo ed	0.88	0.93
35	28	The Young Farmer Association	0.76	1.47

**Note:** N = 34 teachers in 1986 and 217 teachers in 1979.

### Conclusions

The mean rating of each activity was significantly different from at least 17 of the 34 remaining activities: therefore, it was concluded that Missouri first and second year agriculture teachers set priorities for their activities. It was further noted that the first and second year teachers placed the greatest importance on the three traditional components of the secondary school agriculture program: classroom instruction, the FFA, and supervised occupational experience programs.

Based on the high positive (.91) correlation between the first and second year teachers and the teachers surveyed in 1979, it was concluded that teachers tend to establish the same priorities regardless of the amount of teaching experience. This was especially true for the activities associated with classroom instruction, the FFA, and the supervised occupational experience programs.

### Discussion

The priorities of first and second year Missouri agriculture teachers reflected the traditional secondary program emphasis of classroom teaching, FFA, and supervised occupational experience. This is consistent with findings by Goode and Stewart (1981), Iverson and McGuire (1977), and Lockwood (1976). Apparently, agriculture teachers place the greatest

importance on secondary program activities regardless of possible differences in experience or geographic location.

The data examined for hypothesis 2 suggested two differences between the ratings of the beginning (first and second year) teachers in 1986 and the comparison group of teachers in 1979. The first and second year teachers rated work with advisory councils and the recruitment of students higher than did the other teachers. Likely, the decline in Missouri enrollment from 15,734 students in 1979-1980 to 12,865 students in 1985-1986 (Heiman, 1986) could explain the increased emphasis on recruitment activities. In addition, first and second year teachers rated those activities related to adult education lower than did the teachers in the comparison group.

A comparison of job assignments related to adult education revealed that 3 of the 34 (8.8%) first and second year teachers and 30 of 242 (12.2%) teachers studied in 1979 had time assigned to work with adult. Therefore, it would seem that the differences were related to perceptions other than those related to specific job assignments. This finding was consistent with findings of research conducted by Miller and Scheid (1984) which indicated that beginning teachers find it more difficult than experienced teachers to conduct adult programs. Perhaps this higher perceived level of difficulty discourages first and second year agriculture teachers from placing a higher priority on adult education activities. This low priority on adult instruction should receive attention in Missouri preservice and inservice programs.

Overall, it appears that first and second year agriculture teachers perceive the challenge of their job in much the same way as experienced teachers. The challenge for those in leadership positions is to guide the young teacher to develop and maintain appropriate priorities as they learn to manage and live with their job.

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