The Importance and Implementation of Management Functions in Agricultural Teacher Education Programs

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Management plays an important role in all phases of society. Emphasis in management factions and leader responsibilities, however, have centered around business and industry and have been very limited in the academic field. Furthermore, a very limited amount of research has been conducted in higher education, particularly agricultural education, concerning the perceived importance and implementation of management functions and activities found basic to the managerial process of industry.

Objective of the Study

The primary objective of the study (Everett, 1981) was to determine and compare the level of importance and level of implementation of management functions and activities in agricultural teacher education programs as perceived by program leaders and program staff.

Methods and Procedures

The population of the study was comprised of agricultural teacher educators employed in four-year institutions in the United States which consisted of at least three individuals, including one program leader and two staff persons who met selected criteria.

Fifty-one programs were found to meet the criteria from which the sample consisting of two groups was selected. One group consisted of all agricultural teacher education program leaders from the 51 chosen institutions and the second group consisted of one staff member from each of these institutions. The staff member from each institution was chosen alphabetically, selecting the first person at the top of the alphabet who met the selected qualifications.

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A mailed questionnaire was developed and used to collect data from the two groups. The instruments were comprised of two parts. Part one determined the level of importance and the level of implementation of five management functions including: planning, organizing, staffing, directing, and controlling. Each of these functions contained four management activities for a total of 20 items rated using a nine-point Likert-type rating scale. The management functions and activities were chosen based on a review of literature. R. Alec Mackenzie's (1969) model of the management process, however, served as the primary source for the development of this section of the instrument. Mackenzie devised his model from a meticulous review of the works of many leaders and teachers in the management field. Part two determined basic demographical information about the population of program leaders, staff, their agricultural teacher education programs, and their institutions.

The instruments were mailed to the 51 program leaders and 51 program staff for a total of 102 subjects. One hundred percent of the responses were obtained, however, one respondent was found not to meet the criteria established for the selection of participants. Therefore, both the program leader's instrument and the program staff's instrument from this institution were not used in the study, resulting in a total of 100 usable responses.

The analyses of data involved several statistical procedures including frequencies, means, and standard deviations. Since the data were obtained from the total population of agricultural teacher education programs meeting the selected criteria, it was not necessary to analyze the data using inferential statistics. However, paired T-tests were made as a means for the researcher to discuss the differences among the population. These statistics may also provide inference for a future population.

Findings

The findings are described in terms of the objectives of the study. The following describes a brief profile of the 50 institutions and agricultural teacher education programs used in the study. The size of the institutions ranged from 3,592 to 62,7990 with a mean of 20,274. The majority were Land Grant Institutions (1862) organized on the semester system. The largest percentage of the programs were titled Agricultural Education, were organized as departments within a college, and were primarily administered through the College of Agriculture. The majority, besides offering a B.S. degree, offered a master's degree, thesis and a master's degree, non-thesis. Only one-third offered the Educational Specialist and Ed.D. degrees, with just less than one-third offering the Ph.D degree. Student en-

rollment ranged as high as 202 for primary undergraduates, with a mean of 87; 0-32 for master's, on-campus with a mean of 8.5. The mean number of undergraduate agricultural education credits offered was 18.6 semester hours. Graduate agricultural education credits offered averaged around 20 semester hours. These programs employed an average of 5 staff persons with an average 3 persons employed on some type of graduate assistantship.

The largest percentage of the program leaders were titled department head; had been employed in their positions 7 years; had taught high school vocational agriculture 7 years; and were program leaders in the same state where they obtained their high school teaching experience.

The program staff group consisted of approximately one-third each of professors, associate professors, and assistant professors, with the majority having 100% of their time budgeted for agricultural education. They also averaged a mean of 7 years high school teaching experience with the majority currently employed in the same state where they had obtained such experience.

When comparing the program leaders' perception with the staffs' perception (paired by institutions) of the level of importance of the combined activities of each management function, none of the functions nor the total combined management score were found significant at the .05 level. When the level of importance of each of the 20 management activities under the four management functions were compared between program leaders and staff (paired by institutions), none were found significant at the .05 level. These findings are presented in Table 1.

When comparing the level of implementation between the program leaders and the program staff (paired by institutions), three of the functions, staffing, directing, and controlling as well as the total combined management score, were found significant at the .05 level. The staff rated the level of implementation significantly lower in all four cases. When the level of implementation of each of the 20 management activities was compared between program leaders and staff (paired by institutions), eight of the 20 management activities were found significant at the .05 level, all of which were rated lower by the staff. These findings are presented in Table 2.

Table 1

The Level of Importance of Management Functions and Activities in Agricultural Education Programs as Rated by Program Leaders and Program Staff Paired by Institutions

Management activities	n	Program leaders Mean / S.D.	Program staff Mean / S.D.	T-value
Planning (Combined Activities)	49	8.01 / 0.93	8.03 / 0.80	- 0.11
1. Develop long range program	49	8.04 / 1.10	8.27 / 0.91	- 1.14
2. Establish program objectives	49	8.08 / 1.15	8.29 / 1.02	- 0.86
3. Formulate written program policies	49	7.71 / 1.16	7.43 / 1.23	1.22
4. Prepare the program budget	49	8.20 / 1.29	8.14 / 1.17	0.26
Organizing (Combined Activities)	48	7.57 / 1.03	7.47 / 1.28	0.53
5. Establish an organizational structure for programs	49	7.33 / 1.38	7.12 / 1.64	0.66
6. Define responsibilities and authority of staff	49	7.84 / 1.33	7.82 / 1.27	0.09
7. Develop descriptions for positions	49	7.45 / 1.50	7.29 / 1.68	0.60
8. Establish qualifications for positions	48	7.75 / 1.30	7.60 / 1.55	0.68
Staffing (Combined Activities)	47	7.99 / 0.90	7.94 / 0.78	0.24
9. Select qualified persons for available positions	49	8.61 / 0.91	8.76 / 0.60	- 0.87
10. Acquaint new persons with institution and program	48	7.73 / 1.30	7.75 / 1.25	- 0.07
11. Supervise Staff in performing new tasks	49	7.63 / 1.25	7.39 / 1.26	0.86
12. Plan ways for staff to develop professionally	48	8.06 / 1.04	7.77 / 1.31	1.16

Table 1. (continued)

Management activities	n	Program leaders Mean / S.D.	Program staff Mean / S.D.	T-value
Directing (Combined Activities)	49	7.85 / 1.04	7.72 / 1.01	0.67
13. Coordinate departmental activities	49	8.16 / 0.99	8.14 / 1.06	0.10
14. Motivate staff	49	7.92 / 1.35	7.74 / 1.48	0.64
15. Resolve differences among staff	49	7.27 / 1.60	6.94 / 1.84	0.98
16. Encourage creative efforts	49	8.06 / 1.13	8.06 / 0.97	0.00
Controlling (Combined Activities)	49	7.73 / 0.90	7.70 / 1.17	0.12
17. Develop evaluation criteria or standards	49	7.37 / 1.20	7.41 / 1.46	- 0.16
18. Assess progress toward program objectives	49	7.69 / 1.18	7.90 / 1.30	- 1.06
19. Evaluate staff performance	49	7.88 / 1.03	7.74 / 1.38	0.64
20. Revise program plans based on evaluation	49	7.96 / 0.96	7.78 / 1.30	0.91
Total	47	7.80 / 0.79	7.75 / 0.81	0.29

Table 2

The Level of Implementation of Management Functions and Activities in Agricultural Education Programs as Rated by Program Leaders and Program Staff Paired by Institutions

Management activities	n	Program leaders Mean / S.D.	Program staff Mean / S.D.	T-value
Planning (Combined Activities)	48	6.95 / 1.24	6.53 / 1.45	1.48
1. Develop long range program goals	49	6.71 / 1.43	6.41 / 1.99	0.80
2. Establish program objectives	49	7.18 / 1.63	7.08 / 1.77	0.29
3. Formulate written program policies	49	6.39 / 1.63	5.78 / 1.94	1.64
4. Prepare the program budget	48	7.67 / 1.86	6.85 / 2.23	2.13*
Organizing (Combined Activities)	48	6.94 / 1.22	6.46 / 1.40	1.74
5. Establish an organizational structure for program	49	7.06 / 1.38	6.76 / 1.52	0.98
6. Define responsibilities and authority of staff	49	7.12 / 1.54	6.25 / 1.81	2.49*
7. Develop descriptions for positions	49	6.59 / 1.63	6.04 / 2.24	1.39
8. Establish qualifications for positions	48	7.04 / 1.69	6.79 / 1.83	0.69
Staffing (Combined Activities)	48	7.31 / 0.98	6.71 / 1.13	2.79*
9. Select qualified persons for available positions	49	8.16 / 1.09	7.98 / 1.20	0.79
10. Acquaint new persons with institution and program	48	7.31 / 1.46	6.58 / 1.93	2.13*
11. Supervise staff in performing new tasks	49	6.92 / 1.34	6.10 / 1.31	3.08*
12. Plan ways for staff to develop professionally	49	6.90 / 1.33	6.27 / 1.80	2.11*

Table 2. (continued)

Management activities	n	Program leaders Mean / S.D.	Program staff Mean / S.D.	T-value
Directing (Combined Activities)	48	7.10 / 1.12	6.46 / 1.51	2.40*
13. Coordinate departmental activities	49	7.47 / 1.19	7.08 / 1.58	1.43
14. Motivate staff	48	6.94 / 1.33	6.40 / 1.78	1.92
15. Resolve differences among staff	48	7.08 / 1.70	5.88 / 2.09	2.98*
16. Encourage creative efforts	49	6.92 / 1.27	6.47 / 1.95	1.42
Controlling (Combined Activities)	49	6.86 / 1.12	6.23 / 1.32	3.07*
17. Develop evaluation criteria or standards	49	6.55 / 1.53	5.92 / 1.71	2.08*
18. Assess progress toward program objectives	49	6.80 / 1.47	6.31 / 1.57	1.86
19. Evaluate staff performance	49	7.14 / 1.63	6.65 / 1.73	1.70
20. Revise program plans based on evaluation	49	6.94 / 1.33	6.02 / 1.66	3.30*
Total	47	7.02 / 0.89	6.47 / 1.02	2.81*

*Significant at $p<.05$

Conclusions

From this study it was concluded that:

1. The agricultural teacher education program leaders and staff agreed that the industry and business management functions of planning, organizing, staffing, directing, and controlling were important to the management of agricultural teacher education programs.

2. The agricultural teacher education program leaders and staff agreed that the management functions and activities found in industry and business were being implemented in the management of agricultural teacher education programs.

3. The agricultural education program leaders and staff agreed that all five management functions and the 20 management activities were of somewhat high importance in managing an agricultural teacher education program.

4. The agricultural education program leaders believed that the management functions of staffing, directing, and controlling, and management activities in all five functional areas, were implemented at a higher level in their agricultural teacher education programs than did the staff respondents.

Recommendations

The following recommendations are made for further research:

1. Further studies should be conducted on the methods and means to perform the functions and activities of management in agricultural teacher education programs.

2. Further studies should be conducted, concentrating on the individual functions, such as planning and staffing.

3. Further studies should be conducted to determine the perceptions of higher administrators, such as deans, of the importance and the implementation of the management functions and activities in agricultural teacher education programs.

References

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