Journal of the American Association of Teacher Educators in Agriculture
Volume 21, Number 1, pp.26-33
DOI: 10.5032/jaatea.1980.01026

ROLES AND RESPONSIBILITES OF SELECTED AGENCIES AND GROUPS IN PROVIDING IN-SERVICE EDUCATION FOR VOCATIONAL AGRICULTURE INSTRUCTORS IN IOWA

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The need for improvement of in-service activities of vocational agriculture instructors in Iowa has led to many questions concerning who should provide and pay for the in-service education programs. In the past, there has been overlap of roles and sometimes duplication of service among the various agencies providing in-service agricultural education. While a flurry of activities has taken place, goal setting and evaluation have been lacking.

The increasing interest in providing in-service education for vocational agriculture instructors follows a national trend to increase in-service educational opportunities for all educators. This increase in interest has multiplied the problems associated with the administration of in-service education programs.

The rapid growth of in-service education programs has caused some speculation about the future. Edelfelt and Lawrence (1975) listed seven major issues facing in-service education on the national level. These issues may also apply to in-service education for vocational agriculture instructors in Iowa. The seven issues which must be dealt with are:

1. Teacher supply and demand
2. The relationship of pre-service and in-service education
3. The role of higher education
4. The role of teachers and teacher organizations
5. Self-governance for the teaching profession
6. The adequacy of courses, credits, and credentials
7. The role and purpose of in-service education

Considering these issues and the state of in-service education for vocational agriculture instructors today, it became imperative to determine how agencies and groups involved with agricultural education should cooperate in developing a structured, organized, and well-planned framework for in-service education. To meet this need, a study of the roles and responsibilities of selected agencies and groups in providing in-service education for vocational agriculture instructors was recently completed at Iowa State University (Pals, 1977).

Purpose of the Study

The major objective of this study was to determine the roles and responsibilities of selected agencies or groups in providing in-service education for vocational agriculture instructors in Iowa. The secondary objectives were:

1. To identify the preferred location of in-service education programs for vocational agriculture instructors in Iowa.

2. To identify the purposes of in-service education for vocational agriculture instructors in Iowa.

3. To identify the importance of selected factors in motivating vocational agriculture instructors in Iowa to participate in in-service education activities.

4. To determine the preferred model for delivering in-service education programs to vocational agriculture instructors in Iowa.

5. To determine if there were significant differences in the attitudes towards in-service education perceived by selected vocational agriculture instructors as compared to selected school administrators.

Procedures

The population for this study was limited to personnel from eight selected agencies or groups who were or who might be responsible for providing in-service education for vocational agriculture instructors in Iowa. The eight agencies or groups included in the study were: 1) vocational agriculture instructors, 2) agricultural industry personnel, 3) local school district administrators, 4) Iowa State University College of Agriculture department heads, 5) area education agency professional development specialists, 6) area Extension directors, 7) Iowa State University state Extension specialists, and 8) area community/technical college agriculture department heads.

The sample populations were determined by using three different procedures depending on the nature of the agency or group to be included in the study. The three procedures used were: 1) a survey of the entire population, 2) a survey of selected personnel in the agencies or groups who had a relationship with agriculture, and 3) a survey of a sample population generated randomly from the total population. Two questionnaires were developed, one for the

vocational agriculture instructors and one for the other seven agencies or groups included in the study.

The questionnaire included the following divisions:

I. *Academic and Biographic Data.* Data were collected for each of the respondents.

Ia. *In-service Education Attitude Survey.* This section was an assessment of attitudes of teachers regarding in-service credit, how in-service programs should be planned, and how they should be financed.

II. *Responsibilities of Agencies or Groups in Regard to In-service Education.* Respondents were asked to indicate the degree of responsibility specified agencies and groups should have in initiating, coordinating, providing and financing in-service education for vocational agriculture instructors.

III. *Specific Attitudes Toward Location, Purpose and Financing of In-service Education.* Respondents were asked to indicate the preferred location for in-service education pertaining to teaching methods and for in-service education pertaining to agricultural subject matter. Specific questions regarding all costs of in-service education were included in this section.

IV. *Models of Organizational Structure for Providing In-service Education.* Four possible models of organizational structure and delivery of in-service education were included. Respondents were asked to indicate the acceptability of each model and were asked to rank the four models.

The two questionnaires varied only in academic and biographical data collected and Part Ia which was included only for vocational agriculture instructors. The information in Part Ia was already available from the school administrator's group through another Iowa State University research project.

With the exception of part Ia, the instrument was developed by the investigator. Part Ia was located in the literature and permission was obtained from Brimm and Tollett (1974) for use in this study. The instrument was tested with graduate students and faculty members.

A mail survey was used to collect the data, which were analyzed using the computer program known as SPSS (Statistical Package for

the Social Sciences). A multiple analysis of variance was used to test for significant differences among the agencies or groups on each of the items rated by the respondents. The Scheffe' test was used as a post-hoc test to detect differences among group means. In analyzing the attitude survey on in-service education, a paired t-test was utilized to detect differences between the vocational agriculture instructor and his/her school administrator.

Findings

The findings of the study are summarized below:

1. Group means of the respondents indicated that the vocational agriculture instructors and the Iowa State University College of Agriculture teaching and research staff (including all technical departments) should be equally responsible for determining the goals and objectives of in-service education for vocational agriculture instructors. The data revealed these same two groups should have the greatest responsibility in initiating and coordinating in-service education.

2. The study indicated the the participants felt that while state and area Extension personnel and agricultural industry personnel should have some responsibility in providing agricultural subject matter, the Iowa State University College of Agriculture teaching and research staff should have primary responsibility for providing the agricultural subject matter and the instructional methodology in-service education for vocational agriculture instructors. Participants also felt vocational agriculture instructors should be involved in providing in-service education that focuses on instructional methodology.

3. The local school district and State Department of Public Instruction should have the responsibility to finance in-service education including personal costs (travel, meals and lodging) for vocational agriculture instructors.

4. The composite mean ranking indicated that the most preferred location for in-service education pertaining to instructional methodology was the area community/technical college. The favored location for in-service education pertaining to agricultural subject matter was the Iowa State University campus.

5. In-service education for the purpose of the improvement of teaching received the highest mean ranking by the participants in the study. In-service education for self-growth and

experience was ranked second in importance, while increase in salary and meeting recertification requirements were perceived to be least important.

6. The most important factor in motivating vocational agriculture instructors to participate in in-service education activities was self-growth and experience. Attending in-service education activities for the benefit of students was second in importance.

7. When the participants were asked to rate four proposed models of organizational structure, the model with the Iowa State University Agricultural Education Department in-service education coordinator was the most preferred model in delivering in-service education to vocational agriculture instructors.

   In this model, the ISU in-service director in the Agricultural Education Department would serve as coordinator. This coordinator in cooperation with the in-service committee determines needs, then contracts for the training through the agencies available. The training could be provided on a state, area or district basis by ISU College of Agriculture Teaching and Research staff, ISU Extension staff, community and technical college staff, and agricultural industry personnel.

8. In the attitude survey, the vocational agriculture instructors and school administrators agreed that the primary purpose of in-service education was to upgrade the teacher's classroom performance. School administrators and their vocational agricultural instructors indicated that the teachers must be involved in planning, presenting, and evaluating in-service education activities.

   Vocational agriculture instructors felt that they should be allowed release time for in-service education and that the activities should be held away from the local school. While school administrators supported the idea of granting release time, they felt that in-service education activities should be held within the local school.

   Vocational agriculture instructors and their administrators agreed that in-service education sessions should not be held at night. The means, standard deviations and paired t-values for the attitude survey are found in Table 1 at the end of this article.

Recommendations

On the basis of the findings of this study, the following recommendations were made:

1. To assure that in-service education for vocational agriculture instructors in Iowa is improved, every effort should be made to communicate the results of the study to the pertinent agencies and groups.

2. To implement many of the changes suggested by this study, it will be necessary to have a full-time coordinator in the Agricultural Education Department at Iowa State University to coordinate the resources available.

3. An indepth study should be initiated to consider the feasibility of conducting in-service education programs for all agricultural educators simultaneously. Vocational agriculture instructors, area community/technical college personnel, and county, area, and state Extension personnel could benefit from some of the same activities.

4. Further research should be conducted on delivering in-service education at an area or district level as compared to a statewide approach.

5. A study should be conducted to determine financing alternatives among the agencies and groups responsible for in-service education.

6. A study should be initiated to compare in-service education with other indicators as a factor contributing to the acheivement of students in the classroom.

References

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Table 1

MEANS, STANDARD DEVIATIONS AND PAIRED T-VALUES FOR IN-SERVICE EDUCATION ATTITUDE SURVEY COMPARISONS BETWEEN THE VOCATIONAL AGRICULTURE INSTRUCTOR AND HIS OR HER SCHOOL ADMINISTRATOR[a]

Question	Ag Instructor		School Adm.		T-Value
	Mean[b]	S.D.	Mean[b]	S.D.	
1. A teacher should receive in-service credit for professional reading.	3.13	1.09	3.70	0.93	3.08**
2. The implementation of innovations presented in in-service programs is often a function of the support received from school administrators.	2.36	0.92	1.98	0.72	2.24*
3. If more teachers were involved in planning in-service programs, teacher commitment to them would be greater.	2.40	0.97	2.38	0.99	0.11
4. A teacher should receive in-service credit for professional writing.	2.81	0.94	3.57	1.03	4.23**
5. Teachers need to be involved in the development of purposes, activities and methods of evaluation for in-service programs.	2.06	0.75	1.98	0.64	0.55
6. One of the most important ways to judge the effectiveness of an in-service program is whether the teacher uses the results of the training in the classroom.	1.85	0.89	1.74	0.74	0.68
7. A teacher should receive in-service credit for travel.	3.08	1.10	3.52	1.02	1.88
8. In-service education should relate directly to problems encountered in the classroom.	2.06	0.97	2.47	0.93	2.49*
9. A teacher should receive in-service credit for participation in a graduate course at a university.	2.36	0.96	2.51	1.19	0.77
10. Many in-service activities do not appear relevant to any felt needs of the teacher.	3.00	1.11	2.64	0.98	1.72
11. Most in-service activities should be carried on within the school in which the teacher works.	3.47	0.91	2.19	0.90	7.59**

12.	More in-service activities should be scheduled during the school day.	2.60	1.08	3.11	1.12	2.25*
13.	Most in-service programs are virtually useless.	3.94	0.77	4.21	0.74	2.04*
14.	One of the most motivating in-service activities is an opportunity to become acquainted with teaching practices or innovative programs.	1.94	0.66	2.26	0.76	2.35*
15.	Transfer of concepts presented and skills taught in in-service programs to the problems of daily classroom life and school operations is minimal.	3.42	0.87	3.34	0.90	0.42
16.	Teachers should receive some release time for in-service education.	1.66	0.62	2.08	0.83	2.94**
17.	The primary purpose of in-service education is to upgrade the teacher's classroom performance.	1.94	0.73	1.81	0.69	1.22
18.	Most in-service programs do not seem well-planned.	3.74	0.71	3.40	0.95	2.20*
19.	A teacher should receive in-service credit for research.	2.69	0.86	3.43	1.04	3.85**
20.	Our in-service programs seem to suffer from a lack of financial support needed to carry them out.	3.02	0.72	3.64	1.02	3.74**
21.	Teachers should have the opportunity to select the kind of in-service activities which they feel will strengthen their professional competence.	1.85	0.74	2.17	0.61	2.39*
22.	In-service programs must include activities which allow for the different interests which exist among individual teachers.	1.96	0.71	2.02	0.57	0.54
23.	Most in-service programs arise from a study of the needs and problems of teachers.	2.60	0.72	2.49	0.82	0.80
24.	Most teachers do not like to attend in-service activities.	3.36	0.90	2.79	1.08	3.08**
25.	I wish more of our in-service programs were scheduled as three-hour sessions at night.	3.77	1.20	3.57	1.10	0.98

[a]Data based on 53 pairs.

[b]Respondents rated each statement on a 1-5 scale with 1 being strong agreement and 5 being strong disagreement.

*Significant at .05.

**Significant at .01.