ASSESSMENT OF THE PREPARATION AND CAREER PATTERNS OF AGRICULTURAL EDUCATION GRADUATES, 1975-1985

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Teacher preparation and the process through which teachers become prepared to teach greatly influences the quality of educational programs conducted in the public schools. Consequently, efforts must be made to evaluate the effectiveness of teacher-preparation programs and the career patterns of graduates. Follow-up studies are one of the most commonly used measures in evaluating educational programs. According to Denton (1979), follow-up data provide faculty with qualitative ratings of the program, perceived needs of the teacher, and insights into skills required in teaching which may not have been stressed by the existing teacher education program. Additionally, follow-up studies provide evidence regarding the career patterns of graduates.

Although follow-up studies are valuable in providing information regarding student outcomes and program effectiveness, there are reasons of accountability that are also important. They provide evidence of program effectiveness to outside audiences. Neth and Hanson (1976) stated that post-program follow-up studies have traditionally been an integral component of educational research. Recently, as a result of economic and social pressures, there has been a growing demand for accountability, and follow-up studies have received special emphasis.

The determination of graduates' perceptions of their preparation program as well as their career patterns is useful for making program revision decisions. Likewise, the identification of the demographic characteristics of graduates is important to develop a profile of individuals who complete the program.

The role of the vocational agriculture teacher requires competency in a variety of areas. These competencies are derived from the three basic dimensions of the preservice preparation program: general education, technical agriculture, and professional education. A program that is an appropriate combination of these dimensions should prepare competent and effective teachers (Burnett & Yahya, 1987).

Purposes and Objectives

The purpose was to determine the career patterns of graduates in agricultural education from the University of Florida during the period 1975-1985, and to assess their perceptions related to effectiveness of selected aspects of the program in agricultural education in preparing them for careers. Specifically, the study sought to:

1. Determine the perceptions of graduates regarding the quality of selected educational experiences at the University of Florida and the Department of Agricultural and Extension Education.
2. Identify demographic characteristics regarding agricultural education graduates.
3. Identify the professional characteristics and career patterns of agricultural education graduates.

Research Procedures

Population : The population consisted of all agricultural education graduates, both bachelor and/or master's degree recipients, for the years 1975 to 1985, who completed student teaching and teacher certification while pursuing their degrees at the University of Florida. Names and the last known addresses of graduates were obtained from student files, the Office of the Dean for Resident Instruction, or through personal contact. As a result, 189 agricultural education graduates were identified.

Instrumentation : In order to obtain requisite information, a mail questionnaire was developed to gather data from graduates. The questionnaire was reviewed by faculty members and field tested with graduate students in the Department of Agricultural and Extension Education to insure content validity. Six Likert-type scales were developed to obtain respondents' perceptions of selected

Journal of Agricultural Education
Volume 31, Number 2, pp.17-22
DOI: 10.5032/jae.1990.02017

variables. Scale reliability was determined using Cronbach's alpha. The alpha values were as follows: pre-professional courses (.80), technical agriculture courses (.89), agricultural education courses (.88), student advisement (.81), teaching behaviors of faculty (.74), and benefits of the Agricultural Education Society (.96).

Data Collection Procedures: Data were collected between September 22, 1986 through December 10, 1986. All 189 graduates identified were sent a cover letter and a questionnaire. After an initial mailing and two follow-ups, it was determined that 29 of the graduates could not be located, thus making the accessible population 160. A total of 134 (83.75%) completed questionnaires were received from former students. From the 29 non-respondents, a random sample of 5 non-respondents was drawn and telephoned. They were asked to respond to selected items on the questionnaire. An analysis of this information revealed no significant differences between respondents and non-respondents.

Findings

Perceptions of Coursework: Graduates were asked to respond on a five-point Likert scale that ranged from poor (1) to excellent (5) with regard to their perceptions concerning the adequacy of pre-professional, technical, and agricultural education coursework. The mean responses for the three coursework areas were 3.67, 3.82 and 4.00 respectively. This would indicate that the respondents felt the coursework was good to excellent.

When asked to indicate whether the amount of coursework should be decreased, maintained, or increased in each of the three categories, the majority of the respondents indicated that pre-professional coursework should be maintained (81.1%), technical coursework increased (70.9%), and agricultural education coursework should be maintained (66.2%).

Quality of Advisement: Data in Table 1 reflect the respondents' perceptions of the quality of advisement by the agricultural education faculty. Respondents were able to choose among strongly disagree, disagree, undecided, agree, and strongly agree in referring to the types of advisement listed. Numerical values were assigned to each of the choices and ranged from 1 for strongly disagree to 5 for strongly agree. Most respondents perceived the quality of advisement they received from faculty as very satisfactory. Mean scores ranged from 3.7 to 4.5 which would indicate graduates agreed that advisement was very good.

Quality of Teaching: Table 2 reflects the graduates' perceptions of the teaching behavior of the agricultural education faculty. Most respondents were well satisfied with the teaching behavior displayed by the faculty. Data in Table 2 reveal that respondents more frequently agreed or strongly agreed with the teaching behaviors listed than those choosing a response of average, disagree, and strongly disagree. Mean response values were all either 4.3 or 4.4 indicating that the respondents perceived teaching quality to be quite high.

Participation and Perceptions of Student Organizations: Forty-eight (36.1%) of the respondents stated that they were somewhat actively involved in the Agricultural Education Society (AES) while forty-five (33.8%) stated that they were very actively involved. The remaining 30% were either not a member or paid their dues but were not involved. Of those who were members, they generally believed that involvement helped them to understand agricultural education/vocational agriculture (77%), helped develop leadership skills (75.0%), helped them accept and carry out responsibilities (80.0%), helped them work with people (86.0%), helped to develop job skills (64.7%), and made them aware of career possibilities (61.0%).

Ninety-two (69.2%) of the 133 respondents indicated they had belonged to one or more other campus organizations including Agriculture Student Council, Agronomy-Soils Club, Alpha Gamma Rho, Alpha Zeta, Block and Bridle, and Gamma Sigma Delta. Thirty-four (37.0%) of the respondents indicated that they belonged to other organizations.

Demographic Characteristics: Objective 2 was designed to identify the following demographic information regarding agricultural education graduates. There were 43 (32.1%) female respondents and 91 (67.9%) males. Eighty-eight (66.2%) were married while thirty-four (25.6%) were single. The remaining eleven (8.3%) were either separated, divorced, or widowed.

Table 1
Graduates' Perceptions of the Quality of Advisement by the Agricultural Education Faculty

Type of Advisement	Quality of Advisement Frequency (f) and Percent (%) Strongly Disagree f	%	Disagree f	%	Undecided f	%	Agree f	%	Strongly Agree f	5	Mean Response*
Helped get courses needed	1	0.7	3	2.2	3	2.2	48	35.8	79	59.0	4.5
Helped get experience wanted in college	1	0.7	5	3.8	19	14.3	63	47.4	45	33.8	3.7
Well qualified to advise students	0	0.0	1	0.8	4	3.0	54	40.6	74	55.6	4.5
Readily avail. when needed	0	0.0	5	3.7	11	8.1	46	34.1	73	54.1	4.4
Friendly and cooperative	0	0.0	2	1.5	4	3.0	33	24.6	95	70.9	4.6
Made effort to become acquainted with problem	1	0.7	4	3.0	15	11.3	51	38.3	62	46.6	4.3
Appeared happy to be of assistance	0	0.0	3	2.2	7	5.2	42	31.3	82	61.2	4.5
Provided information and assistance for further education	1	0.8	5	3.9	15	11.8	44	34.6	62	48.8	4.3
Provided information and assistance in getting a job	0	0.0	7	5.9	14	11.9	40	33.9	57	48.3	4.2

*Rating scale: Strongly Disagree = 1; Disagree = 2; Undecided = 3; Agree = 4; and Strongly Agree = 5.

Table 2
Graduates' Perceptions of the Teacher Behavior of the Agricultural Education Faculty

Type of Teaching Behavior	Quality of Advisement Frequency (f) and Percent (%) Strongly Disagree f	%	Disagree f	%	Undecided f	%	Agree f	%	Strongly Agree f	5	Mean Response*
Clarity in presentation	0	0.0	2	1.5	4	3.0	75	56.4	52	39.1	4.4
Used variety of teaching methods	0	0.0	10	7.5	3	2.3	59	44.4	61	45.9	4.3
Alert and enthusiastic about subject	0	0.0	3	2.2	8	6.0	58	43.3	65	48.5	4.4
Task oriented (stayed on subject)	0	0.0	1	0.8	3	2.3	68	51.1	61	45.9	4.4
Asked questions and used student ideas	0	0.0	4	3.0	11	8.2	62	46.3	57	42.5	4.3

*Rating scale: Strongly Disagree = 1; Disagree = 2; Undecided = 3; Agree = 4; and Strongly Agree = 5.

Fifty (38.5%) lived in towns or cities with populations less than 10,000. Twenty-seven (20.8%) lived where the population is between 10,000 and 29,999 and twenty-two (16.9%) lived in cities or towns of over 100,000.

Sixty-one (47.7%) of the respondents indicated they lived less than 49 miles from their hometown. Twenty-eight (21.9%) indicated they were between 50 and 149 miles from their hometown. The rest of the respondents were fairly evenly spread in each of the brackets from 150 to greater than 1,500 miles.

Thirty-six (43.9%) indicated that their spouses were less than 49 miles from their hometown. Twenty-one (25.6%) indicated their spouses were between 50 and 199 miles from their hometown. Fourteen (17.1%) indicated their spouses were 1,000 miles or greater from their hometown.

Professional Characteristics and Career Patterns: Objective 3 was designed to identify information regarding professional characteristics and career patterns of agricultural education graduates. A total of eighty-one (60.4%) respondents were employed as vocational agricultural teachers when surveyed; sixteen (11.9%) were formerly employed as vocational agricultural teachers while thirty-seven (27.6%) had never taught vocational agriculture. Most of the respondents, one hundred and three (76.9%), indicated that their first job was as an agricultural education instructor. Twelve (9%) indicated their first job was in agribusiness.

Forty-three (32.3%) indicated they earned an undergraduate degree while forty-three (32.3%) of the respondents indicated they had taken some graduate courses. Thirty-five (26.3%) indicated having earned a master's degree while eleven (8.3%) indicated earning a master's degree along with additional graduate courses. One (0.8%) indicated earning a Ph.D.

Seventy-nine (59.4%) of the respondents indicated they were currently employed as agricultural education instructors at the high school level. Fifteen (11.3%) indicated they were employed in agribusiness. Nine (6.8%) indicated they were employed as non-agricultural instructors.

Forty-nine (39.8%) indicated current annual earnings between $20,000-24,999. Thirty-three (26.8%) indicated earning between $15,000-19,999; sixteen (13%) indicated earning between $25,000-29,999; five (4.1%) indicated earning below $10,000, and five (4.1%) indicated earning greater than $40,000.

Forty-one (52.6%) indicated they were currently teaching in single teacher departments while thirty-seven (47.4%) indicated they were currently teaching in multi-teacher departments.

Thirty (37.5%) teachers indicated their length of contract was twelve months. Eighteen (22.5%) indicated their length of contract was ten months while seven (8.8%) indicated their contract was eleven months. Twenty-five (31.3%) indicated their contract was other than 10, 11, or 12 months. Seventy-one (88.8%) teachers indicated they did receive a salary supplement while nine (11.2%) indicated they did not receive a salary supplement.

Those respondents who currently teach vocational agriculture indicated membership in professional organizations. Membership was highest in the Florida Vocational Agricultural Teachers Association with fifty-two (65.0%). Thirty-six respondents (45.0%) indicated membership in the Florida Vocational Association and thirty-four (42.5%) in the National Vocational Agricultural Teachers Association.

This question was posed to the respondents: If it were possible to start college over, would you major in Agricultural Education? Ninety-five (72.5%) indicated they would major in agricultural education if they were to start college over again. Thirty (22.9%) indicated they would not major in agricultural education and six (4.6%) were undecided.

Conclusions

Graduates perceived the adequacy of the coursework they received as above average to good in the areas of pre-professional studies, technical agriculture, and agricultural education. They rated the coursework received in agricultural education the highest, followed by technical agriculture coursework, and pre-professional coursework. Student teaching received the highest rating by the graduates. Graduates believed that the amount of technical agriculture coursework received by agricultural education students should be increased while the amount of pre-professional and agricultural education coursework should be maintained at its present level.

Graduates perceived the quality of advisement and teaching by the faculty to be of very high quality. Most graduates were members of the Agricultural Education Society. Participation in AES was perceived to be of some to much value to the graduates. They tended to be male, married, living in small communities, teaching in single teacher vocational agriculture departments, live relatively close to their hometowns, and have or are completing educational coursework or degrees beyond the bachelor's degree level. Over 75% of the graduates indicated that they taught vocational agriculture after graduation and 66.9% of the graduates are currently teachers in some field. Almost 60% are current vocational agriculture teachers. Sixty-five percent of the graduates earn $20,000or more per year. Almost 5% earn $40,000or above. Most graduates who were teaching vocational agriculture belonged to the FVATA and FAV. Most do not belong to NVATA and AVA. Almost three quarters of the graduates would major in agricultural and extension education again; about 5% were undecided.

Recommendations

This study should be used by faculty and administrators as they examine the effectiveness and quality of the teacher education program within the department. Efforts should continue to be made to maintain the quality of teaching and advisement students receive in the department. Data relative to career patterns and program perceptions should be collected annually and a formal analysis of these data conducted every three to five years.

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