

Masters Degree Programs in Agricultural Education

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According to a report released by the Middle States Association of Colleges and Secondary Schools (1973), the purpose of masters degree programs such as those in which vocational agriculture teachers typically enroll is to apply and extend previous studies toward professional ends. An additional policy statement released by The Council of Graduate Schools in 1976 expressed the position that all masters degree programs should include a component requiring the student to demonstrate creativity, e.g., a thesis or equivalent non-thesis project. The release of these two position statements reflected a concern by educators that the masters degree program concept had begun to take on differing interpretations. As a result, programs of contrasting design and designation have been developed.

The proliferation of masters degree programs was examined by Ryan (1977) in a national survey of masters degree programs in public and private settings. A total of 203 different types of masters degree programs were reported. Many of these degree types were offered by only one school. Ryan reported the Master of Science degree was the most commonly offered general degree type, followed closely by the Master of Arts, with the Master of Education a distant third. A total of 27 different types of masters degrees were reported in education alone.

Purpose

Because of the documented large number of types of masters degrees in all fields nationally, a study was undertaken to examine the extent of variability in masters degree programs in agricultural education in the United States. Data were gathered to provide answers to the following research questions:

1. What are the types of masters degrees offered to agricultural education graduate students?
2. In what fields or departments are these degrees offered?
3. What percentage of departments offer the thesis and non-thesis options?
4. What are the research requirements for the non-thesis option?

5. What is the average minimum number of hours required to complete the degree in each option?
6. What was the average number of degrees awarded per department in 1979?
7. What are the research and statistics course requirements?

Method

The population in this census study consisted of all colleges and universities having agricultural teacher education departments. The 1979-80 Directory of Agricultural Teacher Educators, which listed 79 universities in the United States including Puerto Rico, served as the frame for the study. A questionnaire, which was judged by a panel of faculty members and graduate students to possess face validity, was sent to one purposefully selected faculty member in each department. After the initial mailing a series of follow-up efforts involving a second mailing of the instrument and contact by telephone resulted in a final response rate of 95%. Five of the responding departments indicated the absence of a masters degree program. Data were summarized according to American Association of Teacher Educators in Agriculture (AATEA) Region for some of the variables. The University of Puerto Rico was excluded from the analysis of data by regions.

Results

Type of Degree

A total of 92 masters degree programs were reported by the 70 departments providing data for the study. Ten different types of degrees were listed by the departments. Almost a majority of the degree types (50%) were designatd as Master of Science. Another 30% were Master of Education, 10% Master of Arts, and the remaining 10% included an assortment of degree types. A large marjority (72%) of the departments offered only one type of masters degree, while 24% offered two types, and four percent offered three or more types. Table 1 presents the types of masters degree programs in each AATEA Region.

Field in Which the Degree was Offered

The masters degree programs were classified according to whether the degree was offered in agricultural education, vocational education, or some other field. Results showed that several universities offered masters degrees in more than one of these fields. However, nearly two-thirds of the programs (64%) were offered under

the departmental framework of agricultural education. Only 16% were offered in vocational education, while 20% were offered in other fields, such as extension education.

Table 1
Type of Masters Degree Offered
by AATEA Region

Region	M of A ¹		M of S		M of E		Other		Total	
	n	%	n	%	n	%	n	%	n	%
Eastern	3	19	6	37	4	25	3	19	16	100
Southern	1	3	18	45	16	40	5	12	40	100
Central	4	17	15	62	4	17	1	4	24	100
Western	1	8	7	59	4	33	0	0	12	100
TOTALS	9		46		28		9		92	

¹M of A = Master of Arts
M of S = Master of Science
M of E = Master of Education

Options Offered

A large majority of the departments (80%) offered both the thesis and non-thesis options. Nine percent of the departments offered the thesis option only, while 11% offered only the non-thesis option.

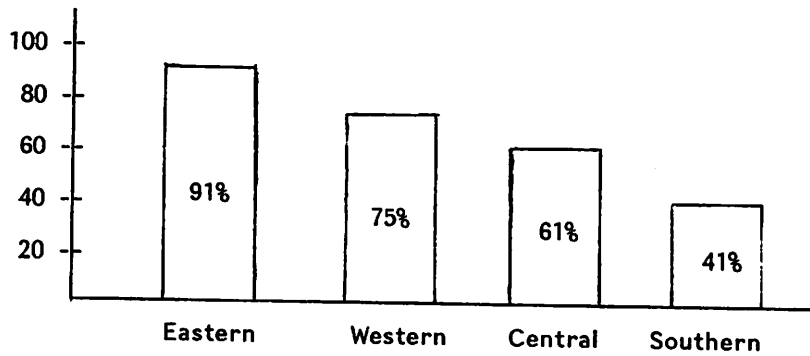
Non-thesis Research Requirements

Non-thesis research was defined as research or development projects completed by students in the non-thesis option as an element of their program separate from regular course work. Of the 64 departments offering the non-thesis option, 59% indicated the presence of such a requirement. However, considerable variation in the existence of this requirement was evident when the AATEA Regions were examined (see Figure 1).

Nearly one-half of the departments required a minimum of three semester hours in non-thesis research. The average minimum requirement was 3.63 semester hours (5.45 quarter hours).

Figure 1

Percentage of Departments Requiring Non-thesis Research by AATEA Region



Minimum Number of Hours Required for the Degree

Eighty percent of the departments offering the thesis option indicated a minimum requirement of 30 semester hours (45 quarter hours). However, the reported minimums ranged from 20 to 38 semester hours (30 to 57 quarter hours). Similarly, approximately one-half of the departments offering the non-thesis option reported a minimum requirement of 30 semester hours. Table 2 presents the data by AATEA Region. No patterns of variation were evident when data were analyzed by field in which the degree was offered.

Table 2

Average Minimum Number of Semester Hours Required for the Masters Degree by Program Option and AATEA Region

<u>Region</u>	<u>Thesis</u>	<u>Non-thesis</u>
Eastern	29.7	31.4
Southern	31.3	34.3
Central	29.3	31.5
Western	28.4	30.5

An examination of the 54 departments offering both the thesis and non-thesis options revealed that 53% required more hours for the non-thesis option. The average number of additional semester hours was 4.3.

Number of Masters Degrees Awarded in 1979

Approximately 700 masters degrees were awarded in 1979 by the 67 departments reporting usable data. The overall average number of degrees awarded per department was 10.74 with a range of 60 and a standard deviation of 10.93. Table 3 summarizes the data for each AATEA Region and indicates that nearly 80% of the masters degrees were awarded in departments contained in the Southern and Central AATEA Regions.

Table 3
Number of Masters Degrees Awarded Per Department
in 1979 by AATEA Region

<u>Region</u>	<u>n</u>	<u>%</u>	<u>Avg./Dept.</u>	<u>SD</u>
Western	68	10	6.80	3.66
Eastern	69	10	5.75	4.36
Central	262	38	11.96	12.01
Southern	299	42	11.96	12.01
TOTALS	698	100		

Hours of Research or Statistics Required

Table 4 summarizes the data according to AATEA Region for the number of credit hours of research and statistics required in the masters degree program. Overall, almost one-half (46%) of the departments required two to three semester hours of research or statistics, and about one-third (31%) required no credit in these courses.

Table 4
Credit Hours of Research or Statistics Required
by AATEA Region

No. of hours	Eastern		Southern		Central		Western		Totals	
	n	%	n	%	n	%	n	%	n	%
2-3	3	25	15	55	9	50	4	40	31	46
4-5	1	8	2	8	1	6	2	20	6	9
6-7	2	17	3	11	2	11	2	20	9	14
none	6	50	7	26	6	33	2	20	21	31
TOTALS	12	100	27	100	18	100	10	100	67	100

Mean = 3.66
Standard deviation = 1.26

Discussion

Emphasizing that unique university regulations influence many aspects of a masters degree program, summaries presented in this study indicate some lack of uniformity in agricultural education masters degree programs across the United States. The numerous types of programs in agricultural education tend to be consistent with the large number of program types in all fields nationally, as reported by Ryan (1977) and the Council of Graduate School (1976). Also, the Council's position that all masters degree programs should include a thesis or equivalent non-thesis project seems to be supported by agricultural education masters degree programs; only eight percent of all departments do not require such a component in their programs. In contrast, a larger proportion of masters degree programs in agricultural education are designated as Master of Education degrees than in all fields nationally.

Examination of masters degree programs by AATEA Regions presented several major differences in program characteristics and requirements, including type of degree, non-thesis research requirements, credit hours required, and number of degrees conferred. These results suggest that efforts to develop and improve masters degree programs may be philosophically feasible and successful at the regional level.

Very little research in agricultural education has been directed toward masters degree programs. This preliminary study has identified topics in this area in need of further study, including:

1. specific characteristics of non-thesis research requirements

2. student enrollment patterns, student satisfaction, and specific requirements according to program type and option
3. intended and realized outcomes of masters degree programs
4. systems of resource and support
5. student characteristics and reasons for enrollment/benefits expected.

References

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