

Agricultural Education Research Summary Report

**Research Capacity of Agricultural Education in
Illinois**

prepared by

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Introduction

The purpose of the research summary report is to provide an overview of a research project to investigate the research capacity of the university Agricultural Education in Illinois. This research project was designed to determine the relative extent to which existing agricultural education faculty at the four Agricultural Education teacher preparation university in Illinois have the existing capacity to complete research activities.

This research project was supported by a grant developed by the Facilitating Coordination in Agricultural Education project staff. This project was funded by the Illinois State Board of Education and supported by the Agricultural Experiment Station of the University of Illinois at Urbana-Champaign. The expected outcome of this research project in conjunction with other projects being researched is to establish a cooperative university agricultural education research plan for Illinois over the next five years.

Objectives

The overall goal of this research project was to ascertain the research capacity of the university Agricultural Education in Illinois. The research objectives of this research project were to determine:

1. The nature and scope of the faculty appointments.
2. The extent of faculty grant activity.
3. The amount of graduate student advising.
4. The self-reported focus of the faculty research programs.
5. The level of research expertise of the faculty.

Methods

The data for this research project were collected using a mail survey. The survey was developed by the North Central Region Agricultural education Research Committee of the USDA Agricultural Experiment Station. A list of nine agricultural education faculty was identified in Illinois using the 1999-2000 Illinois Agricultural Education Directory. Of the nine faculty mailed the survey, seven returned usable surveys.

Findings

The first research question was to determine the nature and scope of Agricultural Education faculty in Illinois. Seven of the nine faculty contacted responded to the survey. Of the seven faculty who participated there was one instructor, two assistant professors, and four professors. Six faculty members indicated the type of faculty appointment they currently had. This information is reported in table 1.

Table 1. The nature of the faculty appointments of Agricultural Education faculty in Illinois.

Type of appointment	Number	Percentage	FTE ^a
Teaching	6	63%	3.8 FTE
Research	5	25%	1.5 FTE
Service	3	6%	0.4 FTE
Administration	1	6%	0.4 FTE

^a FTE represents Fulltime Equivalent faculty.

Six of the seven faculty indicated that they have a nine-month appointment and the remaining faculty member has a twelve-month appointment. Six faculty indicated that they have tenure-track positions, and one reported having a non-tenure track. Of the six tenure track faculty, three indicated that they have earned tenure at their respective universities.

The second research question was to determine the extent of faculty grant activity. The findings are reported in table 2.

Table 2: Self-reported grant activities of Agricultural Education faculty in Illinois from 1995 – 1999.

	High	Low	Mean	Median
Number of grants funded	21	2	7	5
Amount of grant funding. \$1,000,000		\$8,000	\$190,000	\$40,000

n = 7.

The next research question was to determine the amount of graduate student advising. Five of the seven faculty indicate that they advised masters level graduate students in 1999. The average number of masters graduate students advised was eight. Two of the faculty reported that they advised doctoral level graduate students in 1999. The average number of doctoral advisees was two.

The next research question was top determine the self-reported focus of the faculty research programs. The individual research areas reported were distance learning, professional development, evaluation, needs assessment, in-service needs, scheduling, rural schools.

The final research question dealt with the level of research expertise of the faculty. Each faculty member responded to a Likert-type scale indicated their self-reported levels of research expertise. The results of the research questions are reported in Table 3.

Table 3. Mean scores and ranks of Illinois Agricultural Education faculty levels of self-reported research expertise.

Criteria	Mean ^a	Rank
Teaching Methods	4.14	1
Developing Objectives	4.00	3
Motivation	4.00	3
Instructional Design	4.00	3
Pedagogy (teaching methods)	3.71	5.5
Program Evaluation/Review	3.71	5.5
Experiential Learning	3.57	9.5
Supervision of Learning	3.57	9.5
Survey Instrument Development	3.57	9.5
Advisory Committee Operation	3.57	9.5
Educational Technology	3.57	9.5
Technology Adoption	3.57	9.5
Instrument Development (data collection)	3.43	13
Assessing learning styles	3.29	14
Distance Learning	3.14	17.5
Population and Sampling Procedures	3.14	17.5
Qualitative Assessment	3.14	17.5
Educational Program Planning	3.14	17.5
Instrument Validity and Reliability	3.14	17.5
Follow-up studies	3.14	17.5
Adult Education	3.00	21.5
Tests and Testing	3.00	21.5
Evaluation Models	2.86	23
Performance Indicators	2.71	25.5
Performance Reporting	2.71	25.5
Program and Performance Standards	2.71	25.5
<u>Human Performance Measures (assessment)</u>	<u>2.71</u>	<u>25.5</u>

^a Scale: 5 = “expert”, 4 = “much”, 3 = “some”, 2 = “little”, 1 = “none”

Conclusions

Based upon the findings of this study, the following conclusions were derived:

1. All of the agricultural education faculty reported having teaching appointments with an average of 63 percent of faculty time. Five of the faculty reported having a partial research appointment, with an average percentage of time of 25 percent, for a total 1.25FTE dedicated to research in agricultural education in Illinois.

2. The faculty reported an average of five research grants for each faculty member, with a median grant amount of \$40,000 per year for each faculty member.
3. The faculty reported that they advise an average number of masters graduate students of eight and two doctoral students.
4. The faculty reported research interests in these areas distance learning, professional development, evaluation, needs assessment, in-service needs, scheduling, rural schools.
5. The agricultural education faculty reported the highest levels of research expertise in teaching methods, developing objectives, motivation, instructional design,, Pedagogy (teaching methods), and program evaluation and review