

Assessing the Effectiveness of a Leadership Requirement for Agronomy Majors

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Introduction

The Agronomy Department at Iowa State University adopted a leadership requirement for undergraduate agronomy majors based on the department's desired learner outcomes in 1995. Students meet the requirement by either serving in a leadership role or taking a leadership course. Academic advisers determine whether or not a leadership role meets the requirement.

Methods

To begin to determine the effectiveness of the leadership requirement, seniors were surveyed during four semesters in 2002-2004. Undergraduate advisers were also surveyed about their perceptions of the effectiveness of the requirement. Students and advisers were asked eleven items on a 5-point, Likert-type scale (1=Strongly Agree to 5=Strongly Disagree) that when combined describe the perceived effectiveness of the leadership requirement (Cronbach's alpha = .9282). Additional survey questions asked about the students leadership skills before entering the program, and about whether students would have been involved in leadership activities without the requirement. Demographic data were also collected.

In addition to answering questions about the effectiveness of the requirement, students also were asked to provide information about the leadership role or course they used to meet the requirement. A panel of judges made up of undergraduate advisers then rated the quality of the leadership experiences reported by the students.

Results

Overall effectiveness of leadership experience requirement.

	n	mean	SD	Percent in Agreement
Students	76	2.43	0.76	57.9
Advisers	8	2.34	0.56	50.0

ISU Agronomy students have strong leadership skills before entering the Agronomy program at ISU.

	n	mean	SD	Percent in Agreement
Students	78	2.05	0.91	76.9
Advisers	8	3.00	0.54	12.5

Agronomy students have strong leadership skills after completing the leadership experience requirement.

	n	mean	SD	Percent in Agreement
Students	77	2.32	1.04	59.7
Advisers	8	2.50	0.54	50.0

Agronomy students would have been involved with leadership activities even if they were not required for the Agronomy major.

	n	mean	SD	Percent in Agreement
Students	78	2.04	1.12	74.4
Advisers	8	2.63	0.92	37.5

Scale: 1=Strongly Agree to 5=Strongly Disagree



Results, cont.

Quality of leadership experiences according to advisers. (n=9)

Leadership Experience Category	Quality Rating		Percent
	Mean	SD	
University club officer/committee chair	2.14	0.69	9.0
Sports team leader	2.33	0.58	3.8
Agronomy/Soil and Water Conservation Club officer or committee chair	2.40	0.58	32.1
Residence hall officer/committee chair	2.92	0.29	15.4
Fraternity officer/committee chair	3.00	0	5.1
Work related	3.00	0	3.8
Community service	3.44	0.73	11.5
Took a class	3.83	0.41	7.7
Club member, no leadership role	4.00	0.71	6.4
None	5.00	0	5.1
Overall	2.97	0.90	100.0

Scale: 1=Very High to 5=Very Low

Conclusions

Students and advisers had quite different opinions on students' leadership skills both before and after the leadership experience. They also differed on whether or not students would be involved with leadership activities if they were not required in the agronomy major.

According to the advisers, the quality of students' leadership activities varied greatly. The highest quality experiences were officer or committee chair positions in university clubs, leadership positions in sports teams, and leadership positions in the Agronomy or Soil and Water Conservation clubs. The lowest quality leadership experiences, according to advisers, included club membership with no leadership position and taking a class.

In response to a question on the adviser survey, 62.5% indicated that the current process for documenting the completion of the leadership experience requirement is not adequate. Of the advisers surveyed, 75% thought the department should explore options other than the requirement as a means of incorporating leadership into the agronomy curriculum.