

# An Iowa Study: Factors Affecting Agriculture Students Career Choice

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## Abstract

For the vast majority of today's agriculture students, college experience is the first step in selecting a career. Things have changed over the decades, especially attitudes and realities about careers. Over the years, educators have discovered the need to learn more about their students and the factors leading to their pursuit of degrees in agricultural fields. The College of Agriculture New Student Questionnaire was revised and administrated during 1992 to all new entering students enrolled in the College of Agriculture 110 Orientation courses. Besides general background information, attitudes towards expectations of their college degree were collected.

The College of Agriculture at Iowa State University is comprised of 15 departments containing 22 majors and 5 secondary majors. Students enrolled are provided a broad-based education which includes coursework in communications; biological, physical, and social sciences; humanities; and technical subject matter. Upon graduation students find diverse career opportunities because of their well balanced education.

## Objectives

The first objective of the survey was to examine entering students' background and academic preparation. The second objective was to identify factors leading to their pursuit of degrees in agricultural fields. The third objective was to identify their expectations of their college degree. It is then possible to compare this information with previous surveys and allow the College of Agriculture to meet the needs of present agricultural students, and at the same

time, gather valuable recruiting ideas for future years. This paper will address findings from the second and third objectives.

## Methodology

The participants were entering first year students in the College of Agriculture and included both new students and transfer students from other programs or colleges. The 1992

Table 1 Factors Influencing Students' Career Choice

Factor		Level of Influence	
		Agree	Disagree
Prestige associated with an occupation is important in making career decisions	1985 %	61.4	38.6
	1987 %	56.4	43.6
	1989 %	62.4	37.6
	1992 %	58.9	41.1
My family's income had an effect on my choice of curriculum	1985 %	21.0	79.0
	1987 %	25.9	74.1
	1989 %	30.9	69.1
	1992 %	30.8	69.2
Social status associated with an occupation is important in seeking a career	1985 %	47.4	52.6
	1987 %	36.2	63.7
	1989 %	44.8	55.2
	1992 %	40.2	59.8
My parents look favorably upon my career choice	1985 %	93.1	6.9
	1987 %	91.5	8.5
	1989 %	92.5	7.5
	1992 %	90.7	9.3
My parents encouraged me to enter an occupation different than theirs	1985 %	47.3	52.7
	1987 %	45.6	54.4
	1989 %	14.5	85.5
	1992 %	49.8	50.2
Job security is important to me	1985 %	9.3	3.7
	1987 %	9.2	3.8
	1989 %	9.2	4.8
	1992 %	9.0	5.0
The current farm situation had an effect on my occupational choice	1985 %	30.5	69.5
	1987 %	33.5	66.5
	1989 %	49.8	50.2
	1992 %	35.3	64.7

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survey was given to 704 students enrolled in the College of Agriculture 110 Orientation courses. Seventy-four percent (N=519) completed the survey; of these, 135 were transfer students. Male students represented the majority of the student population. The female student population has increased since the 1985 survey and currently represents 40 percent of the student population.

Students were asked which factors influenced their decision to attend Iowa State University and their curriculum choice. Attitudes about agriculture and expectations of their college degree were sought. They were also asked about personal demographics.

## Data Analysis

### Factors Affecting Career Choice

Students were presented with a list of 18 factors which may have affected their career choice. Data suggests that students are giving considerable thought to their occupational choice. Job security is important to them and they believe that agriculture is vital to the future success of the American economy.

Significant differences at the .01 level were found between male and female students on the following statements: I have given considerable thought to my occupational choice; social status associated with an occupation is important in selecting a career; the current farm situation had an affect on my occupational choice. Two statements indicated a significant difference at the .05 level between the male and female respondents, these included: my parents look favorably upon my career choice and my family has been adversely affected by the agriculture recession.

The majority of students in the 1992 survey agreed that prestige associated with an occupation is important in making career decisions (59%), parents look favorably upon their career choice (91%), and job security is important to them (95%). Fewer students (1989 - 50% vs 1992 - 35%) agreed that the current farm situation had an effect on their occupational choice. More students (1989 - 14% vs 1992 - 50%) agreed their parents encouraged them to enter an occupation different than theirs. Table 1 compares data from 1985, 1987, 1989, and 1992.

### Factors Influencing Attitude Toward Agriculture

Students were presented with a list of 8 factors which may have influenced their attitude toward agriculture. Data suggests that students in the 1992 survey agree agriculture is vital to the future success of the American economy (85%).

**Table 2 Factors Influencing Students' Attitudes Toward Agriculture**

Factor		Level of Influence	
		Agree	Disagree
Agriculture is an expanding industry	1985 %	75.6	24.4
	1987 %	8.9	19.1
	1989 %	8.2	12.8
	1992 %	8.8	15.2
There will be adequate jobs in the field of agriculture five years from now	1985 %	74.9	25.1
	1987 %	84.9	15.1
	1989 %	89.0	11.0
	1992 %	82.0	18.0
People employed in agriculture are well respected by those in other fields	1985 %	58.4	41.6
	1987 %	55.3	44.7
	1989 %	64.3	35.7
	1992 %	71.4	28.6
Opportunities in agriculture are unlimited at this time	1985 %	36.0	64.0
	1987 %	46.4	53.6
	1989 %	60.5	39.5
	1992 %	56.2	43.8
My family has been adversely affected by the agricultural recession	1985 %	67.6	32.4
	1987 %	55.8	44.2
	1989 %	52.4	47.6
	1992 %	49.7	49.3
Agriculture is vital to the future success of the American economy	1985 %	96.6	3.4
	1987 %	94.7	5.3
	1989 %	94.8	5.2
	1992 %	95.8	4.2
Pay is generally higher in agricultural-related occupations compared to non-agricultural careers	1985 %	29.5	88.8
	1987 %	28.8	87.3
	1989 %	31.8	79.9
	1992 %	31.4	77.7
Advancement opportunities are abundant in agricultural-related fields	1985 %	64.4	35.6
	1987 %	69.3	30.7
	1989 %	74.0	26.0
	1992 %	67.2	32.8

They also agree there will be adequate jobs in the field of agriculture five years from now (82%), agriculture is an expanding industry (96%), advancement opportunities are abundant in agricultural-related fields (67%), and people employed in agriculture are well respected by those in other fields (71%). Disagreement was noted for pay is generally higher in agricultural-related occupations compared to non-agricultural careers (78%). Table 2 compares data from 1985, 1987, 1989, and 1992.

### Perceived Effect of their College Degree

Students in the 1992 survey have expectations of their college degree to gain technical competence (Mean = 5.84), gain decision making and problem solving skills (Mean = 5.74), and gain critical thinking skills (Mean = 5.78). Female student mean scores were higher on all expectations. A seven-

point Likert scale was used: 1 = no expectations, 4 = some expectations, 7 = very high expectations. Significant differences at the .01 level were identified between male and female students on the following statements: gain interpersonal and communication skills; gain leadership skills; gain critical thinking skills; gain an understanding of multicultural issues and concerns; gain an international perspective. Table 3 compares male and female means.

### Conclusions

There is no question that the nature of work and the task of finding the right job are becoming more complex. For new college students, the decision to make plans for an occupation is far more significant than they may think. The task can become easier if one identifies factors leading to an occupational choice. Jobs that were held as a student will influence perceptions about the things they like to do, the conditions and environments in which they want to do them, and the types of people they prefer as their work associates. They will also learn a great deal about their strengths, weaknesses, interests, personal priorities, and even the degree of challenge they may be willing to accept ultimately when they enter the work force full-time.

Students are giving considerable thought to their occupational choice. Students are looking for job security. They also believe that agriculture is vital to the future success of the American economy. Social status is viewed as important when selecting a career. Nine out of ten students indicated that parents looked favorably upon their career choice. The current farm situation is not affecting their occupational choice as much as it was in 1989. One-half agreed their parents encouraged them to enter an occupation different than theirs.

Students agreed there will be adequate jobs in the field of agriculture five years from now and that agriculture is an expanding industry. They also agreed that advancement op-

**Table 3** Expectations of College Degree Based on Gender of Students

Expectation	Gender	N <sup>a</sup>	M <sup>b</sup>	S.D. <sup>c</sup>	t-value
Gain technical competence related to your major	Male	283	5.778	1.213	-1.34
	Female	195	5.928	1.199	
Gain interpersonal and communication skills		285	5.242	1.256	-2.58**
		195	5.539	1.207	
Gain leadership skills		285	5.225	1.334	-3.17**
		195	5.615	1.320	
Gain decision making and problem solving skills		285	5.712	1.123	-0.63
		195	5.780	1.179	
Gain critical thinking skills		285	5.667	1.201	-2.88**
		195	5.960	1.015	
Gain an understanding of moral and ethical issues related to agriculture		285	4.944	1.533	-1.03
		195	5.472	1.580	
Gain an understanding of environmental impacts of agricultural practices		285	5.425	1.384	-0.34
		195	5.472	1.580	
Gain an understanding of multicultural issues and concerns		284	4.401	1.537	-4.30**
		194	5.000	1.432	
Gain an international perspective		284	4.500	1.572	-3.35**
		193	4.974	1.434	
Gain assistance from faculty in personal assessment and career guidance		284	5.345	1.316	-3.03
		192	5.714	1.281	
Gain computer proficiency		281	4.929	1.435	-1.67
		186	5.145	1.259	

<sup>a</sup>Number; <sup>b</sup>Mean; <sup>c</sup>Standard deviation

portunities are abundant in agricultural-related fields and people employed in agriculture are well respected by those in other fields.

Students enter college with expectations of their college degrees. Students expect to gain technical competence along with decision making, problem solving, and critical thinking skills. Female students have higher expectations of their college degrees than males. Female students rated the following skills higher: interpersonal and communication, leadership, critical thinking, multicultural issues and concerns, and international perspective. It is important that the College of Agriculture make available courses in which students can gain these skills. The College of Agriculture has recently undergone a curriculum change. Many of these expectations are now part of the new college curriculum.

It is important that young people become excited about agriculture. Agriculture is important for the success of American economy. The College of Agriculture has maintained and will continue to maintain high expectations of entering students and those who assist them in completing their degrees. This standard will only be maintained only if we continue to attract students dedicated to agriculture.