

# Survey of Early Leavers: Implications for Recruitment and Retention

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## Abstract

The study involved early leavers from the College of Agricultural Sciences at Oregon State University. The objective was to identify specific traits of early leavers and to determine if certain groups that had been recruited held a higher retention level. Survey results from students who left the College of Agricultural Sciences (CAS) before graduation indicated that reasons for leaving the University or College included: 1) a change in career objectives, 2) a lack of financial resources, 3) and students (specifically females) were poorly prepared for the CAS science based curriculum. The survey also indicates: 1) student clubs and activities appeared to be important to holding student interest, and 2) students with strong backgrounds in 4-H and FFA did not leave at as high a rate as those who did not have that background.

## Introduction

The recruitment and retention of students at the university is important to the success of most major higher education systems. This has been especially true of Colleges of Agriculture which will see an increased demand for agricultural and allied graduates throughout the next decade and a continued shortage of trained graduates (USDA, 1995). To provide an effective strategy for the recruitment of new students and to retain a higher percentage of current students a better understanding of the students who were leaving the CAS was needed.

In research that focused on entering freshmen and assessing educational attitudes and needs, Donnermeyer and Kreps (1994) report on factors that influenced freshmen decisions to enroll in Colleges of Agriculture. Based on a survey of 217 freshmen agricultural majors at The Ohio State University, the researchers concluded that "a myriad of diverse factors seem to influence the decision of those who chose to enroll in a College of Agriculture." These factors ranged from parental influence to experiential backgrounds in agriculture. Similar attitudinal research on new students was conducted by Scofield (1995), at Iowa State University (ISU). In this research it was found that parents had the greatest level of influence on a student's decision to attend ISU (20%), followed by ISU students (15.6%), Vo-Ag Instructor (15.5%), other family members (12.9%), and scholarships

(12.0%). Dyer et al. (1996) found that 94.9% of the College of Agriculture freshmen that had enrolled in high school agriculture programs in Illinois indicated that they intended to graduate with an agricultural degree from the College of Agriculture at the University of Illinois. The researchers also found that only 52.9% of the freshmen in the College of Agriculture at the University of Illinois who had not enrolled in high school agriculture intended to graduate with an agricultural degree.

In other research related to recruitment, Fritz and Sandall (1995) focused on students majoring in Agricultural Education and concluded that student exposure to or participation in agricultural youth programs (FFA and 4-H), recruitment materials, and high school agriculture teachers all had a positive impact on student recruitment. Barrett et al. (1987) pursued the implications of personality traits for retention and recruitment for College of Agriculture students. They concluded that personality traits should be addressed in recruitment methods and materials, thus improving retention. They also concluded that teaching styles should be used that meet the needs of specific student personality trait types. Nokes and Gustafson (1994) provide 18 specific practices for faculty to use in recruiting and retaining women in Agricultural Engineering programs ranging from using first names to getting women involved with research.

For the past several years the College of Agricultural Sciences (CAS) at Oregon State University (OSU) has maintained higher than average growth compared to other colleges in the university. However, retention remains a major concern for all colleges at the university. Although several studies have explored student retention or recruitment on multiple levels, reliable data on students who had left the college and the university without completing a degree program was not available. In order to be more effective in reducing the number of early leavers, data was needed regarding these students. This study's objective was to describe "what is", which in turn may help describe "why".

## Methods

The purpose of the study was to identify why students left the CAS before completing their Baccalaureate degrees. Specifically, the objectives of the study were to:

1. Identify if differences existed among students who left CAS and students who left both the CAS and the University.
2. Identify why students left CAS and the University.
3. Identify specific points of satisfaction and dissatisfaction for students who left before completing their degrees.

The students participating in this study were divided into two groups, those who left the College of Agricultural Sciences but did not leave Oregon State University (Part A) and those who left both the CAS and OSU (Part B). The population for the study was the 483 students who left the CAS, according to Registrar's records, over the five-year period between 1992-1997. The entire population was surveyed for both those who left the CAS but stayed at OSU in a different college, as well as for those who left both the CAS and OSU. Statistical analysis was done by frequency count and percentages to describe the population. The Continuity Adjusted Chi-Square was used at the .05 alpha level to declare a gender significance. The mailed instrument was developed by the Survey Research Center at Oregon State University. Validity and reliability were determined by a field test of students who had left the university earlier than those of the survey group. Both quantitative and qualitative responses were sought by the researchers.

Baseline data for this study from CAS records showed that there were 1038 male undergraduates (50.7%) and 1011 female undergraduates (49.3%) in the CAS at OSU. Participation in CAS club activities averaged 45% for all students in CAS and 35% of all CAS students received some form of scholarship support.

## Results

### Part A

Part A results were for students who left the CAS but not OSU. The population for Part A consisted of 83 students, 40 of whom responded (48 percent response rate). The students surveyed had left the CAS two to eight quarters before the date of the survey but transferred to another OSU college. A Continuity Adjusted Chi-Square was only used to declare gender differences. Three follow-up mailings were done after the initial mailing for a total of four mailings.

- *Most students (72.5%) were still working on their degrees.*
- *Eighty-five percent (85%) percent reported a change of career goal as the reason for changing colleges and majors.*

- *The OSU college which received most (44.4%) of these was the College of Liberal Arts.*

- *Of the 40 respondents in Part A 32 (80%) were female and eight (8) were males (20%), therefore a significantly higher percentage of females left CAS but stayed at OSU as compared to males. The CAS has a near 50-50 female to male ratio.*

- *From qualitative input, females reported 12 times (38%) and males reported zero times that the scientific rigor of the CAS curriculum exceeded their expectations and that scientific content of the CAS courses therefore became a reason for leaving the CAS. These females reported that their high school science preparation was inadequate for the curriculum they faced in the CAS.*

- *Males who left CAS but stayed at OSU reported receiving significantly less scholarship support in the CAS than females who left the CAS but stayed at OSU. Two (2) males (25%) received scholarships and left CAS (therefore 75% of the males who left CAS had no scholarship support). Sixteen (16) females (50%) had scholarship support and left CAS. Average scholarship support for all students in the CAS was 35 percent. Therefore, males who left received less than average scholarship support whereas females who left received higher than average scholarship support.*

- *Only 22 percent of both males and females reported belonging to CAS clubs (as compared to 45 percent membership among CAS students) but 62.5 percent reported belonging to OSU clubs.*

- *Eight males (100%) and 30 females (94%) who left CAS reported no previous FFA involvement. About 30 percent of CAS students were involved in FFA.*

- *Eight males (100%) and 19 females (59%) who left CAS reported no previous 4-H involvement. About 36 percent of CAS students were involved in 4-H.*

- *Twenty percent (20%) of the students who left CAS but stayed at OSU reported starting in CAS because of scholarship support.*

### Part B

Part B results are for students who left both the College of Agricultural Sciences (CAS) and Oregon State University (OSU). There were 400 students who left OSU and the CAS during the five years of 1992-1997. This survey was mailed to all 400 with a response received from 160 for a 40 percent response rate, after a total of four mailings.

- *The highest ranking reasons for leaving the CAS and the university were:*

46.9 percent – lack of money,  
44.4 percent – a change of career goal,  
30.2 percent – dissatisfaction with curricula or teachers, and  
26.3 percent – poor progress toward graduation.

- *When asked why they initially enrolled at OSU the responses were:*

63 percent -- to secure a desired job  
41 percent -- because the family wanted them to  
39 percent -- they knew an OSU student  
23 percent -- received an initial scholarship  
21 percent -- the social activities

- *Seventy-six (76%) of the students who left both CAS and OSU were not involved with CAS slubs or activities. Eighty two percent (82%) of those who left had not been involved with FFA and 69 percent had not been involved with 4-H. Non-involvement in FFA and 4-H for the CAS averaged 70 percent and 64 percent respectively.*

- *Eighty-two percent (82%) of the students in Part B of this survey had not received a degree at the time the survey was completed and only 4.4 percent were still working on degrees from other institutions (primarily community colleges).*

- *Eighty-nine percent (89%) of the students who left both OSU and the CAS went to work initially after leaving OSU.*

In comparing gender related issues for those leavers of both OSU and the CAS:

- *More males (97%) than females (93%) went directly into the work place.*
- *More males (31%) went into military service after leaving OSU as compared to females (0.6%).*
- *There was no significant difference by gender for numbers of students who left both OSU and CAS. (70 males and 89 females, with one gender response missing.)*
- *Females (52%) reported a change of career goal more frequently than males (34%).*
- *Females who left (36%) were more likely to have been involved with university level clubs and student*

*activities than males who left (21%) both OSU and the CAS.*

- *Females who left (32%) were more likely to be in the dorm system as compared to males who left (11%), whereas males who left (14%) were more likely to be in the Greek system than females who left (6%).*

OSU data shows that early leaver housing arrangements are consistent with university averages for housing.

## Conclusion and Recommendations

The main differences between students who left the CAS but stayed at OSU as compared to those students who left both the CAS and OSU were 1) students who stayed at OSU but left the CAS reported a change in career goal as the main reason for leaving, whereas 2) the students who left both the CAS and OSU reported a lack of financial resources as the main reason for leaving.

Connectedness seems important to retaining students. Students who left in both Part A and Part B of this study reported lower involvement with CAS clubs and activities than the CAS average. The CAS should recruit a higher percentage of students with FFA and/or 4-H backgrounds. More of these students tend to stay in the CAS to the completion of their degrees than students who do not have this background. Targeted recruitment may help retention numbers. However total numbers of students also remains a concern for university administrators. Retention and recruitment may have conflicting goals at times.

Recruitment efforts should provide students with accurate information about majors, especially the science required to be successful in the major. Too frequently recruitment efforts do not provide adequate information about the majors or the preparation necessary to be successful in the majors. Specifically the science background necessary for success.

High school counselors should be made aware of the science-based nature of CAS programs so they can direct students to both agricultural classes (and FFA participation) and science classes. If scholarships are to be granted and retained, students must have the scientific background necessary to be successful in agriculture.

Through the average number of scholarships gained by early leavers was not different from scholarships gained by those continuing their CAS degrees, both groups of leavers in this study report a serious lack of financial resources. With nearly 50 percent of the early leavers reporting lack of money as a major reason for leaving the university it seems reasonable that scholarship support needs to be increased for both recruitment and retention.

Students who have average academic capability but who have the potential for becoming dependable, honest, trustworthy employees in jobs which require a Baccalaureate degree need scholarship support. Systems should be devised to get scholarship aid to students with GPA's in the 2.00-3.00 range. Further, scholarship committees should look beyond GPA for granting purposes. Indicators of career goals in agriculture and a desire to make a contribution to agriculture plus evidence of past work experience or youth activities in agriculture should be used to direct scholarship support to students most likely to stay in agricultural programs and enter agricultural careers.

Too many students reported low-value courses (from the standpoint of content) and poor quality instruction. Colleges of Agriculture and universities in general should take the challenge of providing a relevant and timely curricula, provided by high quality teachers who know both the research and the practice of what they teach. Then teach using methodology conducive to retaining students.

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