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# Two-Year College Retention Strategies for an Agricultural Mechanization Program

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## Introduction

Maintaining viable and consistent student numbers in Colleges of Agriculture over the past ten to fifteen years has become challenging in many states. Faculty and administrators associated with agricultural curriculums continue to face the demographic challenges in these enrollments. Slocombe (1986) noted a 25% decline in agricultural curriculums at land grant universities over a five-year period in the early 1980s. We must realize that the decreasing number of traditional age rural youth and the bleak economic climate for agriculture for much of the late 1970s and 1980s has and will continue to significantly affect enrollments in agricultural curriculums. The decreasing number of farms and rural youth has also impacted enrollments in secondary vocational agriculture programs and the traditional 4-H programs. One must then assume that these declining numbers of agricultural students would have a carry-over effect to post-secondary institutions strictly core agricultural curriculums. This statement is substantiated by Cole and Bok (1989) who discovered that the type of high school curriculum chosen by a student has little impact on the actual decision to go to college, but has a significant influence on their choice of major.

In response to this concern, recruiting efforts focusing on secondary vocational agriculture programs have increased in many states. Furthermore, new recruiting initiatives have been developed and implemented to focus on urban populations and non-traditional students. Several recent studies have been conducted which focus on maintaining these viable enrollments. Boone, Newcomb, Reisch and Warmbrod (1989) focused a portion of their efforts in order to attract high ability, non-traditional students. Magette, Smith, Stewart and Wheaton (1988) focused their efforts by means of recruiting undeclared majors from the freshmen and sophomore class at the University of Maryland. Brown and Cvanara (1991) discovered the value of scholarships in regard to attracting students and maintaining enrollments.

Today, however, faculty and administration must realize that recruitment is only one part of the student numbers is-

sue. Retention must also be included as a second part of this concern. Too frequently programs have focused solely on recruitment strategies and initiatives and have not addressed retention strategies to any significant degree.

It is quite important to note that retention efforts should start at the moment the student's application is received and accepted. In a study conducted by Austin (1988), it was discovered that only 28% of college freshmen had made application to only one educational institution. The vast majority, the other 72%, had made application and had been accepted to several institutions.

As one might suspect, the transition period into a formal educational institution also plays a crucial role in student retention. The first few weeks of the college experience should be an exciting and enjoyable transition experience. We must realize however, that the high school-to-college transition for the traditional student or the entrance or re-entrance to a formal post-secondary institution for the nontraditional student can be a rather traumatic experience. Weinstein (1988) notes that many, if not most students are not aware of the different environmental and task demands that will be found as they enter college. He stressed the importance of good academic advising to ensure that students are given optimum opportunities for success during this transition period. Similarly, Shults (1988) noted that college students in transition do not know what a good college student is or what a good college student does. He too stressed the importance of sound academic advising to assist college freshmen in identifying the characteristics of a good student.

Finally, one must understand that retention efforts must extend beyond the early transition period. Inadequate career planning, excessive extra-curricular activities, limited educational aspirations, inadequate referrals to counseling services and the conflicts between the academic environment and the part-time employment are further examples of the types of events that can and do create retention problems.

## Objectives

The purpose of the article is to describe a portion of the enrollment management plan developed by the former Department of Agricultural Mechanization at the University of Minnesota, Waseca. The specific objectives were to:

1. Identify the different types of appropriate retention activities presently being utilized by educational institutions

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- II. Develop and implement strategies that would increase the retention rates for agricultural mechanization students

### **Retention of Students**

Program enrollment management not only involves assertive recruiting, but also must include carefully planned retention strategies. It is a common practice for college bound students to make application to more than one institution. This, of course, allows the student to make a final decision at a much later date. The various institutions however, may not be aware of this situation and can incur a retention problem prior to the actual start of classes.

Faculty, staff and administrators must be made aware of their responsibilities to ensure that new students make a good transition into the college environment. Mechanisms must be in place to ensure that this transition period is monitored. Not only should the educational institutions be concerned with the academic transition, but also the cultural clash that may well occur involving the student's personal values (see Skaggs, 1992). Various aspects of the individual's culture will be tested. Such conflicts can occur as the student experiences a greater independence. Further confusion will surface as new potential careers are identified as the student's educational environment is expanded.

Based upon the importance of these issues, the agricultural mechanization faculty held several meetings to discuss feasible strategies that would accompany their recruiting efforts. A review of the literature provided limited insights as to viable mechanisms and strategies to deal with this issue. Therefore, a certain degree of creativity was utilized in regard to identifying and implementing viable retention initiatives.

#### **Formal Letter of Welcome**

At the time a new advisee's file was received by the faculty member, a personal welcome letter was sent to each student. The actual content of this letter was left to the discretion of each faculty, but included information pertinent to the program. Further, the faculty would enclose a business card and the campus 800 phone number. Finally, an Agricultural Mechanization Club cap was sent along with the letter as a welcome gift to each incoming student. As faculty, we assumed that those students would immediately wear these in their respective high schools and communities. The cost incurred was minimal and the free promotion of our college in their home communities and schools was deemed to be extremely valuable.

#### **Monitoring the Transition Period**

During the 1970s and early 1980s, student numbers in the agricultural mechanization program remained at a level of concern. Typical numbers of new freshmen agricultural mechanization students were somewhat lower than deemed desirable. Each new freshman in the program was advised

independently with no formal mechanism to instill a cohesiveness in this group during the first quarter of classes. In recognition of this situation, specific strategies were implemented. First of all, a new course was developed and implemented which became a requirement for all first quarter agricultural mechanization freshmen. This course, Introduction to Agricultural Mechanization, served as a mechanism in which to bring all first quarter majors together. Furthermore, the faculty responsible for this course observed each student in their transition period, provided an orientation to their major, provided further insight into the students' potential careers, developed strategies to involve each student in the Agricultural Mechanization Club and secured research data from the group during transition.

The value of bringing together this group into a course during their first quarter proved extremely valuable. The following year, a specific sequence of coursework was established over the entire period to graduation. Agricultural mechanization students enrolled in three agricultural mechanization courses together during their first quarter, three courses second quarter and two courses in their third quarter. Due to the differences in students' career plans, greater flexibility was given in the second year. At least one common required course in the agricultural mechanization curriculum was designed in their last year however. This strategy has proven to be extremely valuable as faculty can monitor the group as a whole from the first quarter until graduation.

#### **Transition Questionnaire**

By no means can you expect that all of your advisees will make a successful transition into college. In an attempt to monitor this more closely, a research questionnaire was developed to secure information in regard to the students' adaptability into their new academic environment. The questionnaire secured information regarding a variety of topics involving recruitment as well as retention. Specific data was collected involving the degree of influence of various factors in selecting college and major, high school grade point average, previous work experience, previous and present extracurricular activities, past leadership activities, previous or present organizational membership, high school graduation class size, hours studying per week and the students' greatest frustrations about present college life.

The primary purpose of the questionnaire was to gather information so that the agricultural mechanization faculty can better understand the group as a whole. Summarized data over a period of several years has provided valuable information on the true strengths and weaknesses of these recruiting and retention efforts. After summarization, each questionnaire was forwarded to the appropriate academic advisor. Each faculty reviewed the specific responses in order to gain valuable information about each advisee in the first weeks on campus. Potential problems can be addressed, better career advising did result and a professional bond between the advisee and the academic advisor developed much earlier in the academic process.

## Summary

Strategic recruitment strategies are a vitally important component of any successful post-secondary institution. The faculty certainly realized that the funds and efforts directed toward recruitment and retention have increased dramatically over the past several years. Creative ideas must be developed, implemented and periodically evaluated in order to monitor the transition of each student. These initiatives proved to be extremely successful in regard to creating a successful transition for each student.

## References

- Austin, Alexander W. 1988. "The American Freshman: National Norms for Fall 1988." *Chronicle of Higher Education*. September, p. 17.
- Boone, Harry N. et al. 1989. "The influence of recruiting strategies designed to attract high-ability nontraditional students." *National Association of College Teachers of Agriculture Journal* 23(1):7-10.

- Brown, Robert G. and Joseph G. Cvancara. 1991. "Effect of scholarships on student retention." *National Association of College Teachers of Agriculture Journal* 35(4):31-32.
- Cole, R. Lee and David A. Bok. 1989. "High school vocational agriculture and success in college." *National Association of College Teachers of Agriculture Journal* 23(1): 10-13.
- Magette, W.L. et al. 1988. "Reviewing an undergraduate recruiting program." ASAE paper No. 886530. American Society of Agricultural Engineers, St. Joseph, Michigan 49085.
- Shults, David. 1988. "Discussing with students the characteristics of successful studenting." *Innovative Abstracts* 10(17). The University of Texas at Austin.
- Skaggs, Rhonda. 1992 "Implications for Teaching Student Recruitment and Retention, *National Association of Colleges and Teachers of Agriculture Journal*. 36(2) 15-18.
- Slocombe, J.W. 1986. "Factors associated with enrollments in agricultural curricula at land grant universities." *National Association of College Teachers of Agriculture Journal* 30(4):26-28.
- Weinstein, Claire E. et al. 1988. "The high school-to-college transition." *Innovation Abstracts* 10(21). The University of Texas at Austin.



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