Abstract
The College of Agricultural and Environmental Sciences at the University of Georgia has developed and implemented a program to improve student retention. In this paper, the Academic Counseling Program is described, including the purpose and function of the program, the types of problems students experience, and ways in which the program attempts to help students achieve academic success. Preliminary data to assess its overall effectiveness are presented.

Introduction
Employment opportunities for college graduates in food and agricultural sciences are projected to be greater than the number of qualified annual graduates (Goecker et al., 1999). At the same time, national enrollment trends in these disciplines vary, including some with declining numbers (FAEIS, 2000). Across the country, colleges of agriculture are faced with rising admission standards and the challenges of graduating top quality students from their programs. Cole and Thompson (1999) noted that colleges of agriculture have faced problems with enrollment over the past 30 years. The issues are multifaceted, and can include both initial choice of a major (Cole and Thompson, 1999) and factors that contribute to early withdrawal (Cole and Fanno, 1999).

Soldner et al. (1999) noted that institutions of higher learning are being pressured to improve undergraduate education programs, increase student satisfaction, and develop programs that address failure to complete programs. One example of this trend, at a programmatic level, is the Freshman Year programs that have been implemented at many institutions to improve student retention (Colton et al., 1999). At a personal level, some believe that effective retention results from the quality of interpersonal relationships between the student and a concerned representative (e.g., faculty, advisors, etc.) of the university (Tinto, 1998). The program described in this paper is based on the assumption that personal contact with students to identify some of the factors that have affected academic achievement is a critical first step for retaining students who may otherwise fail to achieve their academic potential.

Addressing Student Retention
Within the College of Agricultural and Environmental Sciences (CAES), faculty members are responsible for advising students on academic program requirements. Although other areas related to academic, emotional, and social functioning have sometimes been addressed by faculty, most do not have significant training or experience in these areas. Additionally, some faculty members view this level of involvement as being outside the scope of their responsibility as educators.

To provide better support for students having difficulty completing degree requirements, the Academic Counseling Program (ACP) was implemented in the College of Agricultural and Environmental Sciences (CAES) at the University of Georgia. The ACP was designed to coordinate and supplement, the faculty-based academic advising program in our college. The ACP was presented to CAES department heads and undergraduate advisors to clarify that this program would complement, rather than substitute, academic advising. The involvement of undergraduate advisors is critical in retaining students who may otherwise fail to achieve their academic potential.
coordinators and department heads throughout the development, implementation, and revision of this program has been instrumental in: (a) generating ideas about proactive ways to address the needs of students with academic difficulty, (b) increasing the dialogue about student retention issues within the CAES, and (c) increasing the level of student participation in the program.

The objective of this report is to describe the creation of the ACP that was modeled after a similar program in the College of Education at the University of Georgia. The features and function of the program, including preliminary data to assess its overall influence are also presented.

**Description of the Academic Counseling Program**

The Academic Counseling Program was implemented in the CAES with the following objectives in mind.

1. To assist any CAES student, regardless of grade point average or classification, with problems that may be affecting the attainment of their academic goals.
2. To assist CAES students in identifying the source(s) of academic difficulties and design an action plan to resolve the problem(s).
3. To support CAES students by helping them to identify available resources within the university.
4. To help retain CAES students at risk for academic dismissal.

**Competencies of an Academic Counselor**

The Academic Counselor (AC) within CAES is a staff position based in the Office of Academic Affairs. The college recruited an individual holding a graduate degree in counseling and experience in working with college students to develop and coordinate this program. One advantage to this approach is that the counselor would have the necessary skills for early identification of problems where the student is not able to articulate the cause of concern. The position was funded by providing a graduate assistantship to an individual with clinical experience who is working toward a Ph.D. in counseling psychology.

**Assessment and Problem Identification**

When a student is placed on academic probation, she/he is notified that they must meet with the AC to discuss the circumstances that may have contributed to the decline in academic performance. The student and counselor focus on identifying problem areas(s) and develop an individualized academic plan. The process includes assessing the student's functioning in a variety of areas that include:

1. Student's understanding of factors causing her/his academic difficulty
2. Student's knowledge of university guidelines for probation and dismissal
3. Present course load
4. Information on living environment
   a. Employment and work schedule
   b. Relationships with roommates
   c. Social support system at the university
   d. Level of family involvement
5. Study skills assessment
   a. Study habits
   b. Time management
6. Level of connectedness to the university
7. Student suggestions for how the college can better respond to her/his need(s) as a student
8. Student suggestions for improving her/his academic standing
9. Academic goal setting for the current semester

**Empowering Students to Succeed**

The student is encouraged to identify strengths and weaknesses and work with the AC to obtain assistance through the many services available at the university. The program encourages students to solve their own problems by familiarizing them with the resources available in the university system and by providing support as students acquire new skills. At the University of Georgia, there are many programs (counseling centers, career development centers, tutorial/academic assistance, disability services, health clinic, etc.) available to provide support to students. However, in some instances students are not aware of these services and as a result, many of these programs are underutilized. As such, one goal of the ACP is to provide information to students on resources on campus. Follows up sessions are scheduled to assess progress, provide encouragement, and revise the plan as needed. Students that are involved in the program and clear probation are invited to continue utilizing the services of the ACP and some have chosen to do so in subsequent semesters.

The ACP is not designed or intended to replace the services of counseling centers and mental health clinics on campus. The student may report symptoms of a problem that alert the counselor to the appropriateness of a referral for further assessment. When this occurs, the relationship between the AC and the student can serve as an influential factor in facilitating the student's referral for further evaluation. For example, a student who was experiencing test anxiety and was concerned about seeking help from a psychologist asked, “Will receiving psychological services affect my ability to obtain employment at some future point?” The academic counselor was able to address the concern and this allowed the student to make an appointment and receive the services needed.
Identifying Students at Risk
The Academic Affairs Office in the CAES analyzed student grade point averages (GPA = s) in the fall of 1999 to identify students who were experiencing academic difficulty. Academic difficulty was defined as falling below the GPA of 2.0 required for graduation. There were 1,142 students in CAES for the fall 1999 semester. A total of 88 students or 7.8% were on probation during this period. In the spring 2000 semester, there were 1046 students enrolled in CAES and 90 or 8.6% were on academic probation.

Levels of Academic Probation
According to policies at this institution, students are placed on academic probation at the end of any term in which their grade point average for hours taken at this institution is below 2.0. Removal from academic probation requires that the student achieve a 2.00 average. The four categories of probation are Scholastic, Continued, First Dismissal, and Second Dismissal. The term scholastic probation denotes that the student's GPA has dropped below the 2.0 mark at the end of a given semester. Continued probation denotes that the student has not achieved a 2.0 cumulative at the end of his/her scholastic probationary term and in the subsequent semester is required to attend a minimum of 9 semester hours with a 2.3 minimum semester GPA. Students who fail to achieve the 2.3 semester average with 9 or more hours face first dismissal. The policy for first dismissal requires that the student may not enroll for classes until one semester has elapsed. Second dismissal occurs when the student returns from first dismissal and fails to maintain the 2.3 minimum GPA with 9 semester hours. University policy requires that students placed on second dismissal may not enroll for one calendar year.

Three Levels of Involvement in Academic Counseling
To evaluate the utility of the program after two semesters, three student groups were identified: 1) those that received academic counseling for one semester; 2) those that received the counseling for more than one semester; and 3) those that never received the counseling. The student involved in counseling was defined as one who attended, at a minimum, the initial meeting and took action to resolve the identified problem. There were five students that were referred by concerned faculty and considered to be voluntary. These students were included in the counseling group. A student that was involved in the program for longer than one semester and was taking action to resolve the problem area identified was placed into the continued counseling group. The no counseling group consisted of students that failed to contact the ACP and did not schedule an initial meeting. Only 74 students on probation were enrolled in the fall of 1999 and 85 enrolled in the spring 2000. There were 63 students in the counseling group, 14 students in the continued counseling group, and 87 students in the no counseling group.

Problem Areas Identified That Affect Academic Performance
Students that used the services of the ACP presented a range of issues that affected their academic performance. The most common problem encountered was that many students, transfer students in particular, were under-prepared for the demands of our college. Failing courses such as chemistry, physics, and calculus accounted for 40% of the identified problem for students in the program. The mean SAT score for this group was 997 (the mean SAT of the fall 2000 freshman class at the University of Georgia was 1204) and many of the students experienced difficulty during the first semester at our institution. Others showed a pattern of repeated withdrawals from higher level math and science courses. Because the issue centered around difficulties in math and science, these students were referred to the Academic Assistance tutorial program on campus. Academic Assistance offers a number of courses designed to improve the student's study skills and test taking strategies. A number of students were unfamiliar with this service and found the programs offered as helpful. Referring a student for tutoring at Academic Assistance in and of itself is not the goal of the ACP. The greatest challenge to working with this group of students was helping the student understand the need for additional assistance and acting on that need.

Many students lack an awareness of the science and math background necessary to obtain a degree in many of the programs in CAES. For example, some students in engineering did not realize that higher level mathematics is required to be successful in this major and this led to an uninformed decision in major selection. Some students selected a major and spent a great deal of time and energy pursuing a degree that was not consistent with their interests and aptitudes. In these cases, the goal was to help them identify resources for deciding on a major that was consistent with their interests, aptitudes, and career goals.

The second most common concern involved adjustment issues in attending a university (32%). This was especially true for students who transferred from smaller two-year institutions. Most of the concerns centered on the problem of larger class size and difficulty feeling connected to the university. For other students, the issue centered around mismanagement of time and placing too much emphasis in developing social networks at the expense of academics. A common theme was an
unrealistic expectation about the level of difficulty of courses at this university and the study time required outside of classes. Discussing time management and organizational skills was helpful to many of these students. The remaining categories were as follows: work/financial issues (10%), relationship problems (8%), poor academic advising and major selection (5%), significant family problems (3%), medical problems (2%), and mental health issues (2%). The complexities of the problems faced by students at risk are indeed varied and require the AC have some minimum competencies with a range of issues to be effective with this population of students. The purpose of the ACP is not to keep all at risk students in the CAES. In fact, some may find that they are more interested in other majors and could better achieve their academic potential in another field of study or another educational institution.

**Evaluating Program Effectiveness**

Data were collected and analyzed to compare the academic progress of the counseling, continued counseling, and no counseling groups over two semesters following inception of the ACP. The number of students that cleared probation was defined as a measure of program success (See Table 1). The data suggest that the number of students that participated in the counseling cleared probation at a higher rate than students that received no counseling. Additionally, of the students that participated in counseling, a significantly fewer number were dismissed when compared to their no counseling counterparts. To further examine program success, students were classified into one of two groups, successful or unsuccessful. Successful denotes clearing probation or having an improved GPA at the end of the semester. Unsuccessful denotes an unchanged or lower GPA score at the end of the semester. Some students were able to improve their overall GPA, although they remained on probation. These students were considered successful, while again an unchanged or lower cumulative GPA was categorized as unsuccessful (see Table 2).

To examine group differences in end of semester GPA, while controlling for beginning of semester GPA, a one-way analysis of covariance was employed (ANCOVA). The assumption that there is a relationship between the beginning and end of semester GPA’s was tested and there was a significant relationship between the variables, $F (2,160) = 94.19, p < 0.001$. The results also indicate that the groups were not equal with respect to the end of the semester GPA means $F (2,160) = 5.68, p = 0.004$. Means and standard deviations of the counseling groups are displayed in Table 3.

Three contrast tests were employed to examine the essential differences between the three groups. The adjusted group means and standard deviations were counseling (1.91, 0.04); continued counseling (1.89, 0.08); and no counseling (1.76, 0.03). Using the Bonferroni method to control for family-wise error rate ($k = 3$) the significance level for the contrasts was set at 0.0167. Using this criterion, the GPA values for the group that received counseling did not differ significantly from the continued counseling group ($p = 0.77$). There was no significant difference between GPA values for the continued counseling and no counseling group ($p = 0.12$). However, the counseling group performed significantly better than the group that did not participate in counseling ($p = 0.001$).

The results suggest students in the counseling group significantly improved their GPA scores by the end of the semester compared to students in the no counseling group. However, it is interesting that no significant difference in end of semester GPA scores was found between students that participated in the counseling group and those that participated in ongoing or continued counseling. One conclusion that can be drawn is that involvement in counseling beyond a semester did not improve student GPA.
scores. On the other hand, a limitation of the study involves the small number of participants in the continued counseling group.

**Revisions to the Program One Year After its Implementation**

Feedback from students, faculty, and staff, led us to rethink the goals of the program and improvements to implementing the program were made. As a result of the feedback, a mandatory orientation to the program was implemented for students on probation. All students in CAES experiencing academic difficulty are at least aware that a program exists to provide assistance to students. Procedures have been implemented within the Office of Academic Affairs in CAES that allows enforcement of the mandatory orientation by flagging student records and preventing them from registering in the following semester unless they have participated in the orientation session.

Individuals who have been academically dismissed from the university can re-enter the institution with approval of the Office of Academic Affairs. For individuals that are returning from dismissal, they are required to meet with the associate or assistant dean of academic affairs along with the academic counselor to discuss the student=s plans for being successful upon returning to the university. The ability to interact with the student during this interview process has provided valuable information that has helped to us reach a more informed decision regarding readmission of a student. In a number of cases, our concern for a student=s ability to succeed has resulted in recommendations being made for the student to implement upon his/her return. Students are asked to verbally agree to the recommendations and must agree to participate in the ACP before a decision is made regarding the student=s petition for readmittance.

Looking at data collected and anecdotal evidence, the ACP can improve student success. The implementation of this program provides a further example of a caring, nurturing climate that exists within our college. Despite the mandatory orientation for all students on probation and the mandatory participation for students returning from dismissal, most students have reported being appreciative of the concern and commitment to their success at this institution. In our experience, any initial ambivalence about participating is usually overcome when the academic counselor conveys a genuine concern about the student.

Burr et al., (1999) noted that true retention occurs before the student is enrolled at the university and anticipates the unique needs of the students being served. The ACP is collecting the type of information that will help us anticipate the needs of the students and help us create an academic environment that allows students to reach their academic potential.

**Literature Cited**


