

Stakeholders' Perspectives: Students' Perceptions of Retention Efforts in a College of Agriculture



J. R. Dunn¹, B.J. Hains² and R.B. Epps³
University of Kentucky
Lexington, KY

Abstract

Researchers' examined a college of agriculture's retention efforts from the students' perspective. More specifically researchers' sought to determine what impact, if any, freshman seminar courses had on the first-year student experience. Additionally, researchers examined student interactions with faculty in the college, the quality of educational experience and questioned whether participation in extracurricular activities contributed to student social integration. Lastly, the researchers determined whether student classification influenced satisfaction with the educational experience within the college. Results indicated students viewed retention efforts favorably; however, a sense of academic "community" was lacking and highly desired.

Introduction

Undergraduate student enrollment in American colleges and universities continues to increase nationally while retention of these students perpetually declines. According to the National Center for Educational Statistics (2007), enrollment in degree-granting institutions increased by 16% between 1985 and 1995; however, between 1995 and 2005, enrollment increased by a rate of 23% from 14.3 million to 17.5 million. It is evident that while overall enrollment numbers have increased, degree completion rates for first-time, first-year freshmen remain low. Snyder, Dillow and Huffman (2007) found that 58% of first-time, first-year freshmen that enrolled in a four-year college between 1995 and 1996 completed a bachelor's degree by 2001. Approximately 7% percent of these students completed a certificate or associate's degree, 14% were still enrolled without receiving a degree, and 21% were no longer working toward a bachelor's degree (Snyder et al., 2007). These statistics highlight a discrepancy between entering college freshmen and administrative retention efforts.

While administrators realize the need for student retention efforts, programming is often designed and implemented without fully understanding student needs. This is often haphazard, as Tinto (1993) states, "*Though there is much to be gained from understanding how similar types of institutions have successfully addressed the issue of retention, it falls upon the individual institution to assess for itself the wisest course of its own action*" (p. 192). In other words academic institutions must assess the needs of the most valued asset; the student, before implementing retention policies.

Role of the Academic Institution

Tinto's (1993) theory focuses on critical periods in the typical college student's career when actions by the institution can be effective in preventing departure. The first critical period occurs during the student's first formal contact with the institution. The application process, specifically, is when a student first forms an impression of the social and intellectual character of the institution. If the institutions materials present unclear or unrealistic expectations, it is easy for the student to misinterpret the realities of their first year, possibly leading to disappointments and departure.

Tinto (1993) also identifies orientation programs as another source of early departure. These programs are the beginnings of integration into the institution. Most new students desire accurate and complete information about institutional life, degree requirements and where to find assistance. However, most institutions fail to provide this information or fail to provide it in a manner understood by the student (Tinto, 1993). However, if used properly, orientation programs can be quite effective in assisting with the transition to college.

Tinto (1993) lists transition assistance programs, counseling, advising, early contact programs and integrated first-year programs as effective tools

¹Director of First Year Success, N8 Agricultural Science Bldg. North; phone: (859) 257-3468; Email: jamie.dunn@uky.edu

²Assistant Professor of Agricultural Education, 507 Garrigus; phone: (859)257-7578; Email: bryan.hains@uky.edu

³Assistant Professor of Agricultural Education, 708 Garrigus; phone: (859) 257-3275; Email: rebekah.epps@uky.edu

institutions can use to positively contribute to retaining students. This includes integrating ceremonies and rituals to help new students assimilate into the life of a community. If properly conceived, freshman year ceremonies can assist students in overcoming the difficulties associated with separation and transition (Tinto, 1993).

Based on these indicators, Tinto (1993) explains that institutions' long-term intervention programs should focus on continuing forms of academic assistance, advising, counseling and educational programs that seek to involve students into the life of the institution. It is essential for members of the academic community to demonstrate the institution's commitment to the welfare of its students by focusing on educational growth and retention (Tinto, 1993).

College of Agriculture Student Attrition

Within the Commonwealth of Kentucky, the State General Assembly enacted the Postsecondary Education Improvement Act of 1997 (House Bill 1) designed to evaluate post-secondary quality and retention. According to this mandate, Kentucky must have a major comprehensive research institution ranked nationally in the top twenty public universities. To be in compliance with this mandate, the president of the university imposed directives regarding student enrollment, retention rates and graduation rates which were outlined in the university's 2020 Business Plan (2005). According to the plan, enrollment at the university must be increased by 7,000 students, retention rates for first-time, first-year students must increase to 92% and the six-year graduation rate must increase to 77.5% to become a top 20 institution by 2020. College enrollment and retention rates reported at the time of this study are presented in Table 1.

In response to the low graduation and retention rates at the University of Kentucky, the 2007-2008 \$2 billion budget mandated more than \$35 million to be targeted toward efforts to improve retention and graduation rates. Specific initiatives included hiring additional faculty and academic advisors, an increase in student financial aid to offset tuition increases, classroom and laboratory renovations and an increase in faculty and staff salaries (Blanton, 2007).

Furthermore, university administrators initiated several retention efforts. One such effort was the implementation of the Academic Alert system. This system identifies students who may be experiencing or have the potential to experience academic difficulty such as students with low exam scores or poor attendance. Representatives

from each college receive information on these students so that they can contact them and provide assistance. In an effort to emphasize proactive student development, the university restructured recruitment programs and the admission process to be more academically focused. In doing so, prospective students had a more realistic expectation regarding the academic demands required by the university. Additionally, the university released its University Island in Second Life to assist with integration into the institution through information, resources and improved social networking.

The university also increased its offerings of the freshman seminar course AG 101: Academic Orientation so that the majority of first-year students could enroll in this course. AG 101 is taught by faculty and staff from across campus and is designed to give freshman students an orientation to college. Students receive instruction on topics such as academic expectations, utilizing campus resources, diversity, alcohol education, managing stress, classroom decorum, academic advising and managing credit card debt.

While these efforts represent campus wide initiatives to improve retention, the College of Agriculture made additional efforts to improve retention. These efforts include creating a full-time advising position that focuses on success and retention of the college's first-year students. Another included a redesign of the required GEN 100: Issues in Agriculture course. The course became restricted to freshmen and the curriculum includes a required summer reading, a service learning project and an orientation to campus. In addition to these efforts, workshops for freshmen on academic probation, focusing on time management skills, study skills and test taking strategies, were implemented to reduce student departure.

While these initiatives support established literature, they were designed and implemented without student input. The purpose of this study was to examine the influence of college retention efforts from the students'

Table 1: University College Retention Rates

College	Fall 2007 Enrollment Retained	Retained Within college	Retained Within University	Total Retention Rate
Agriculture	258	74.8%	7%	81.8%
Arts & Sciences	767	70.9%	13.7%	84.6%
Business & Econ.	385	70.4%	11.4%	81.8%
Comm. & Info. Studies	154	61.7%	9.7%	71.4%
Design	63	81.0%	11.1%	92.1%
Education	199	72.9%	11%	83.9%
Engineering	380	60.8%	23.1%	83.9%
Fine Arts	133	63.2%	15.7%	78.9%
Health Sciences	124	57.3%	17.7%	78.0%
Nursing	168	70.8%	7.2%	78.0%
Social Work	15	80.0%	N/A	80.0%
University Studies	1189	55%	23.6%	78.6%

Adapted from the *University Institutional Research, Planning, and Effectiveness* website.

Stakeholders' Perspectives:

perspective. The specific areas explored included: student first year experience, interaction with faculty, social integration, mattering and satisfaction. These areas were chosen based on prior research pertaining to student development and retention (Kuh, 2007; Pascarella and Terenzini, 2005; Spady, 1970; Tinto, 1993).

The researchers sought to determine what impact, if any, freshman seminar courses have on the first-year student experience. Additionally, they examined student interactions with faculty in the college, the quality of educational experience and questioned whether participation in extracurricular activities does contribute to student social integration. Lastly, the researchers determined whether student classification influenced satisfaction with the educational experience within the college.

Methods

The primary mode of inquiry included a researcher-developed survey. Surveying was chosen due to its versatility, low cost and its ability to generalize findings from a small sample size to the larger population (McMillan and Schumacher, 2001). The electronic survey was developed and posted using www.surveymonkey.com for participants to complete. This website was chosen for its ease of operation by the user, its data analysis tools and because the sample possesses a high level of computer literacy (Poynton, 2004).

The survey consisted of closed-form, open ended and opinion questions based on the primary themes of Tinto's theory of student departure and those of supporting theorists. Closed form questions were designed to provide student demographic data. Participants were asked to indicate the extent to which he/she agrees or disagrees for each statement within the opinion-based section. Respondents were only to indicate N/A for questions that truly did not apply to him/her. Response categories were abbreviated using the following acronyms: SA-strongly agree; A-agree; D-disagree; SD-strongly disagree; N/A-not applicable; AVG-rating average; N-total response count. The rating average was computed using the rating scale: 4-strongly agree; 3-agree; 2-disagree; 1-strongly disagree; 0-not applicable (Johnson and Christensen, 2000).

The target population included undergraduate degree seeking students enrolled in the College of Agriculture. Students were selected from the years 2005-2008 as they represented the time period of program implementation. Non-degree seeking students were excluded because most non-degree seeking students complete prerequisites to gain entry into a professional program (i.e. pharmacy, medicine, veterinary science) and do not intend to complete a degree at the university.

Once non-degree seeking students were removed, the population included 1,216 students. For a population of 1,000, a sample size of 278 respondents would be needed to obtain a confidence level of 95%, (Salant and Dillman, 1994). Using this information as a guide, the sample size was comprised of 278 students who were randomly selected from the target population. To secure a random sample a spreadsheet was provided by the Director of the Advising Resource Center for the College of Agriculture. Data were then sorted by student identification number. From the target population, 94 students participated in the study resulting in a response rate of 34%. Research has shown a continued decrease in response rates and that techniques which have traditionally been applied to mail surveys to increase response rate do not affect the response rate to email surveys (Sheehan, 2001). However, the sample represents the wide range of characteristics embodied by the broader student population. Therefore, the results of this study can be accurately generalized to the total student population in the College of Agriculture.

The study was reviewed and approved by the University of Kentucky Internal Review Board prior to implementation. It was then pilot tested to establish content validity and to substantiate questions, format and evaluative scales (Creswell, 2003). The pilot test included 37 students enrolled in an undergraduate course within the College of Agriculture. Suggested revisions included formatting adjustments and the addition of college expectation questions. After revisions were made, the survey was sent to several college faculty for review.

Following faculty approval, the survey was posted online for 41 days, allowing sufficient response time (Schaefer and Dillman, 1998).

Participants completed a survey during the Spring Semester of 2009. To solicit participation in this study, an e-mail with the study's description, objectives, purpose and instructions for the survey was sent to the sample population requesting participation. A total of five follow-up e-mails were sent to the sample to solicit full participation (Schaefer and Dillman, 1998). All respondents, identified by their student identification number, were entered into a drawing to receive one of ten \$25.00 gift cards. Recipients of the gift cards were randomly selected with the assistance of a random number generator.

Once data were collected, chi-square tests were used with varying independent and dependent variables to measure certain findings for significance (Johnson and Christensen, 2000). For analysis purposes, responses to the rating scale opinion questions were combined into single categories so that the data could be simplified

and more organized for analysis. Strongly agree and agree responses were combined into the single category of “agree” and responses of strongly disagree and disagree were combined into the single category of “disagree.” In addition, responses to the four open ended questions were categorized and coded so that parallel themes could be established. The data collected from respondents were used to identify characteristics that could be generalized to the total student population within the College of Agriculture.

**Table 2: Student Retention Survey Responses:
Opinion Questions related to First-Year Student Experience**

Question	SA	A	D	SD	N/A	AVG	N
I completed AG 101 and found it to be a useful course.	1.1% (1)	21.6% (19)	5.7% (5)	2.3% (2)	69.3% (61)	2.70	88
The information I learned in AG 101 helped me adjust to college.	1.1% (1)	20.7% (18)	6.9% (6)	2.3% (2)	69.0% (60)	2.67	87
For students who began as freshmen in fall 2008 ONLY: Completing GEN 100 as a freshman in fall 2008 made me feel more connected to the College of Agriculture.	9.2% (8)	14.9% (13)	4.6% (4)	2.3% (2)	69.0% (60)	3.0	87
I feel that my high school experience adequately prepared me for the expectations of college.	17.0% (15)	39.8% (35)	21.6% (19)	19.3% (17)	2.3% (2)	2.56	88

Limitations of the Study

The primary limitation of the study was that the results are contextual, pertaining only to undergraduate degree seeking students in the College of Agriculture. However, this was intentional as the study aligns with Tinto (1993) in that institutions must evaluate their own needs in order to properly implement retention policies.

Another limitation was the period of time in which the study was conducted. Due to the length of time required to develop the survey, conduct the pilot test, revise the survey and undergo the institutional review board’s approval process, the study was not made available for participation until three weeks prior to the end of the academic semester. During this time, students are typically overwhelmed with academic demands and are reluctant to devote their energy to additional activities, which may have affected the response rate.

Finally, researcher bias could be inferred as the researchers were employed by the College of Agriculture and have associations with many members of the sample. In an attempt to diminish this bias, survey research was conducted so that members of the sample would be free to express honest and sincere confidential opinions without any influence from the researcher.

Results and Discussion

First Year Student Experience

Approximately 74% of students who completed AG 101, the university freshman seminar course, found it to be a useful course (Table 2). Additionally, 70% of these students found that the information learned in AG 101 helped them adjust to college. The redesigned GEN 100: Issues in Agriculture course also proved to be beneficial to these students. For freshmen who completed the course in fall 2008, the first term in which the course was offered only to first-year College of Agriculture students, 74% of respondents agreed that the course helped them feel more connected to the college.

Additionally, results indicated that only 58% of the respondents felt their high school work adequately prepared them for college. This finding suggests that a large percentage of students (42%) do not feel adequately prepared for college-level work by their high school.

Interactions with Faculty

Approximately 69% of respondents had regular interactions with faculty outside of the classroom and those interactions were positive (Table 3). Students with majors in Career and Technical Education (100%), Food Science (100%), Forestry (100%), Community Communications and Leadership Development (85%) and Equine Science and Management (80%) had the highest percentages of regular interactions with instructors outside of the classroom. The results suggest that students were developing close, professional relationships with faculty. Of the respondents, 81% agreed that they had developed a close, professional relationship with at least one faculty member. Furthermore, the numbers of clubs, organizations and/or intramural sports respondents are involved in significantly impacted their interactions with faculty (Table 4). This could imply that students involved in extracurricular activities have more opportunity for interactions with faculty.

Data from the opinion based questions suggested relations between faculty and students in the College of Agriculture are generally positive. However, there also seemed a desire for improved relationships and clearer communication. One of the common themes in the open-ended responses related to the development of relationships and student mattering. This can be best articulated in the following student quote:

“How about if [administrator] and his office assistants eat in the deli and have conversations with students for one...I’ve had wonderful interactions with them, and if they could spend time with the students outside of the office setting it would be incredibly beneficial—students would see them in a different light.”

Stakeholders' Perspectives:

Social Integration

Approximately 95% of respondents developed close, personal relationships with other students since enrolling in the university (Table 5). Involvement in clubs, organizations and/or intramural sports significantly influenced these relationships (Table 6). This finding suggests that involvement in extracurricular activities contributes to the development of relationships with other students. Additionally, 91% of respondents indicated that participation in extracurricular activities positively contributed to their college experience.

The results of the opinion questions suggest that most students socially integrated into the college and were involved in extracurricular activities. However, a common theme found in responses to the open-ended questions included a desire for more opportunities for faculty/student involvement, enhancing the academic community within the college:

I feel that more programs designed to stimulate interactions between students on the lines of a social with benefits like food and music. This would create bonds and help students that may not know each other to meet, interact and possibly study together improving scores and friendships. Success in class would lead to a greater pride in the programs after we leave and that leads to suggestions to prospective students from alum.

Based on these responses, it was clear that students desired more opportunities for both students and faculty to become more involved in the college. Students wanted more events such as picnics and cookouts that create a fun, social community for both students and faculty.

Mattering

Approximately 64% of respondents felt that their success mattered to the administration of the university (Table 7). In comparison, 92% of respondents felt that their success mattered to College of Agriculture faculty. This suggests students believed they mattered more to college faculty than to university administration. Furthermore, 97% of respondents felt that most faculty members in the college were genuinely interested in teaching and student learning. Likewise, 84% of respondents felt that their advisor positively contributed to their educational experience. Respondents' major did not significantly impact response. However, students with majors in Agricultural Biotechnology (71%),

Table 3: Student Retention Survey Responses to Interactions with Faculty

Question	SA	A	D	SD	N/A	AVG	N
I have regular interactions with instructors outside of the classroom.	19.5% (17)	48.3% (42)	23.0% (20)	6.9% (6)	2.3% (2)	2.82	87
The interactions I have with instructors outside of the classroom are positive.	34.1% (30)	53.4% (47)	2.3% (2)	1.1% (1)	9.1% (8)	3.33	88
Since enrolling in the university, I have developed a close, professional relationship with at least one faculty member.	39.8% (35)	40.9% (36)	14.8% (13)	4.5% (4)	0.0% (0)	3.16	88

Table 4: Opinion Question of Involvement in Extracurricular Activities

How many university or college clubs/organizations/intramurals are you an active member in?							
		0	1	2	3	4	N
The interactions I have with instructors outside of the classroom are positive.	Agree	18	14	22	12	3	69 86.25%
	Disagree	0	1	1	0	1	3 3.75%
	N/A	6	2	0	0	0	8 10.00%
	N	24	17	23	12	4	80 100.00%

Chi Square =16.6872 df=8 p=0.0335

Table 5: Student Retention Survey Responses Related to Social Integration of Students

Question	SA	A	D	SD	N/A	AVG	N
Since coming to the university I have developed close personal relationships with other students.	48.9% (43)	46.6% (41)	2.3% (2)	2.3% (2)	0.0% (0)	3.42	88
My participation in student clubs, organizations, and/or intramural sports positively contributes to my overall college experience.	29.5% (26)	39.8% (35)	6.8% (6)	0.0% (0)	23.9% (21)	3.30	88

Table 6: Student Involvement in Extracurricular Activities

How many university or college clubs/organizations/intramural sports are you an active member in?							
		0	1	2	3	4	N
Since coming to the university, I have developed close, personal relationships with other students.	Agree	20	17	23	12	4	76 95%
	Disagree	4	0	0	0	0	4 5%
	N	24	17	23	12	4	80 100%

Chi-square=9.8246 df=4 p=0.0435

Landscape Architecture (67%), and Animal Sciences (60%) felt that their advisors contributed the least to their overall educational experience.

Satisfaction

The final critical period as identified by Tinto (1993) lies in the years beyond the first when students decide either to leave higher education altogether or to transfer to another institution. Related to this decision is student satisfaction with their educational experience. The results of this study suggest that satisfaction was generally high for students in the College of Agriculture.

Based on the findings for opinion questions related to satisfaction (Table 8), 85% of respondents were satisfied with the education they were receiving at the university and 89% felt that their degree program was properly preparing them for a career after graduation. Neither students' major nor classification significantly influenced the results. However, students majoring in Animal Sciences had the lowest level of educational satisfaction at 60%. Additionally, students majoring in Animal Sciences and Landscape Architecture had the lowest positive response regarding career preparation with 73% and 67%, respectively.

Conclusions/Recommendations

First Year Experience

The first year of college is a critical transition period in which student withdrawal is the highest (Tinto, 1993). Within this study the college is assisting with the transition from high school to college by offering students freshman seminar courses. This is supported by literature that indicates providing students with freshman seminar courses has been shown to be an effective retention strategy and aid in the transition (Tinto, 1993; Kuh, 2007). The results of this study confirmed that students found value in the freshman seminar courses and that they positively contributed to the students' educational experience.

Students found the freshman seminar courses to be beneficial as they provided useful information and help them adjust to college. Therefore, these courses should be expanded to help students feel connected with the university and college. First-year seminar courses could also be used to help familiarize students with the social and academic demands of college as well as university policies and procedures. This may help reduce some of the anxiety associated with the first-year student experience and assist students in being better prepared for college life.

Students indicated they had positive interactions with faculty and were developing professional relationships. This finding coincides with numerous studies that have determined the extent and conduct of interactions with faculty members and students largely determine the impact of collegiate success (Bean, 1980; Pascarella and Terenzini, 2005; Spady, 1970; Thomas, 2000;

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Tinto, 1993). One student illustrated this sentiment by stating, "I think overall the relationships are something to take pride in."

Students enjoyed their interactions with college faculty but desired more. The college should consider more opportunities for students and faculty to interact. Students also desire faculty to become more involved in college events currently in place. Students felt college faculty were genuinely interested in their success; however, needed to exhibit that interest by becoming more involved with students. Students participating in this study suggested events such as pep rallies, cookouts, picnics, or club fairs to allow more opportunity for interaction between faculty and students. These functions would assist in creating the feeling of community.

Academic advising has been identified in the literature and in this study as an area that can assist with student retention (Tinto, 1993). Students value their academic advising experience. In order to improve the student advising experience faculty and staff should take advantage of opportunities made available to improve interaction and communication with students.

Social Integration

Results indicated students were developing close, personal relationships with other students, proven to be effective in reducing student departure (Pascarella and Terenzini, 2005; Tinto, 1993). According to Tinto (1993), social integration into the academic institution has a direct correlation with student persistence. Students agreed that involvement in extracurricular activities positively contributed to developing relationships with other students and enhanced their college experience.

**Table 7: Student Retention Survey Questions
Relating to How Relevant Students Feel They Are to the College of Agriculture**

Question	SA	A	D	SD	N/A	AVG	N
I feel that my success as a student matters to the administration of the University.	15.1% (13)	47.7% (41)	22.1% (19)	14.0% (12)	1.2% (1)	2.65	86
I feel that my success as a student matters to the faculty of the College of Agriculture.	31.8% (28)	60.2% (53)	5.7% (5)	2.3% (2)	0.0% (0)	3.22	88
Most faculty members in the College of Agriculture, with whom I have contact, are genuinely interested in teaching.	37.5% (33)	56.8% (50)	3.4% (3)	0.0% (0)	2.3% (2)	3.35	88
My advisor positively contributes to my educational experience.	35.2% (31)	47.7% (42)	10.2% (9)	5.7% (5)	1.1% (1)	3.14	88

Table 8: Student Retention Survey Results Related to Satisfaction

Question	SA	A	D	SD	N/A	AVG	N
11. I am satisfied with the education that I am receiving at the University.	25.0% (22)	60.2% (53)	12.5% (11)	2.3% (2)	0.0% (0)	3.08	88
14. I feel that my degree program is preparing me well for a career after I graduate.	34.1% (30)	52.3% (46)	8.0% (7)	2.3% (2)	3.4% (3)	3.22	88

Stakeholders' Perspectives:

While students were developing relationships with other students, they desired more opportunities for participation in extracurricular activities. Based on this finding, the college should consider implementing activities that are student focused and allow for more interaction between students of different majors. Student suggestions included activities such as picnics, cookouts, volleyball games, student club fairs, pep rallies and concerts.

Mattering

Mattering is derived from studies on people in transition and relates to the collegiate educational experience (Rayle and Chung, 2007; Schlossberg, 1989; Schlossberg et al., 1995). This study revealed students felt that they matter more to college faculty than to university administrators. One student exemplified this aspect by stating, "The faculty generally care and take an interest in their student's success." This suggests that college employees need to understand the importance of their role toward student success. Administrators, faculty and support staff should be aware of the university's mission of student success and understand their role in it. In doing so, students will feel as if they matter not only to the college but also to the entire university. Recommendations for how this can be achieved should be explored further.

Satisfaction

Student satisfaction relates to the years beyond the first when students will decide whether or not to leave higher education (Tinto, 1993). Students felt that their educational experience within the College of Agriculture was welcoming and friendly and were generally satisfied, which positively contributes to their persistence. One student stated his/her satisfaction with this statement, "I think the College of Agriculture is doing a great job!" This was also highlighted in students believing they were adequately prepared for their future careers. Based on this finding, the college needs to continue to provide a positive and supportive environment that strengthens the educational experience.

Implications

This study examined initiatives designed by administrators within the College of Agriculture to improve student retention from the students' perspective. Several of the identified initiatives align with the fundamentals found in the literature on student retention. However, a longitudinal study needs to be conducted using study participants. A longitudinal study could more accurately assess whether or not participants were truly retained. This would allow for a more accurate

analysis of the characteristics prevalent in students who matriculate within the given context. This would also further support the need for students to have a genuine input into retention efforts.

The examined university is a land-grant institution; therefore, a meta-analysis of similar studies should be conducted from similar institutions. In doing so, administrators can identify common retention efforts which should be considered for implementation. Additionally, a meta-analysis of retention studies within colleges of agriculture could potentially reveal characteristics of students that are unique to agricultural majors.

The college should consider conducting a study of students who have not been retained. A study such as this could identify factors that contribute to student attrition. This could assist in isolating specific areas that the college needs to focus on to reduce student departure.

Student retention is one of the most challenging issues facing the higher education community. For an institution to implement effective initiative, research must be conducted so that strategies can be developed that are specific to the needs of the institution and the student. Literature can only provide a framework. The needs of the student at the individual institution must be evaluated so that retention efforts fulfill the needs of the most important component of student retention: the student.

Additional efforts identified by this study need to be considered by college faculty and administrators so the educational experience can be improved for students, which will in turn reduce student departure.

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