Office of Institutional Research
2005-2006 Student Retention Report

December 2006

ABSTRACT: This report documents a series of analyses carried out by the Office of Institutional Research in Fall 2006 to assist the University in 1) understanding the reasons for the 3% drop in retention of main campus, new full-time degree seeking freshman for 2005-2006 and 2) understanding reasons why students who are retained do or do not achieve sophomore status. Students were more likely to be retained if they were female, had better academic preparation, participated in enrichment programs, lived on campus, had financial support, became better socially integrated into college life, and had positive academic experiences. Surprisingly, they were also better retained if they enrolled in a greater number of first year classes taught by instructors and lecturers (perhaps a reflection of teaching quality) and if they changed their majors a greater number of times (which may be a positive academic strategy). The study also validated many previous assumptions about which retained students achieve sophomore status; they are those that are female and Caucasian, had better academic preparation, participated in enrichment programs, had financial support, became better academically integrated into college life, and had positive academic experiences.

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Background and Methods

Improving and maintaining student retention is one of the most important challenges currently facing Bowling Green State University. Retention rates for new, full-time degree seeking freshman have fluctuated from a high point of 82.2% in 1986-87 to a low of 74.0% in 2001-02. While the retention rate of new, full-time degree seeking freshman was 79.1% in 2004-05, it dropped to 76.1% in 2005-06. Consequently, the Office of Institutional Research was charged with the task of examining a wide array of first year student characteristics to gain a better understanding of the drop in retention. Developing an improved understanding of the factors behind the retention decrease is a key goal for both the University and its constituents.

The 3.0% drop in retention comes at a pivotal time for the University. BGSU has emphasized a strong commitment to the successful transition and matriculation of its students. To that end, substantial financial and program support has been directed to programs and services that assist and complement new students' transition to college. Additionally, these first year student initiatives come at a time when University resources, financial or otherwise, are already constrained.

Preliminary analysis by the Office of Institutional Research early in the Fall 2006 semester (see Tables 1 and 2 for further detail and comparative retention information for the previous year), indicated that the rate of retention dropped even further than the overall rate of retention for the following groups of students

- Males (-4.1%)
- African-Americans (-8.1%)
- Hispanics (-7.0%)
- All students of color (-5.5%)
- Business Administration (-3.2%)
- Musical Arts (-6.3%)
- Technology (-9.5%)
- the 26-36 ACT score range (-4.9%)
- no ACT score (-9.4%)
- the 2.00-2.49 high school GPA range (-6.6%)
- the 3.00-3.49 high school GPA range (-3.2%)
- the 3.50-4.00 high school GPA range (-4.0%)
- out of state students (-6.9%)

In addition, retention rates for students in residential learning communities and first year programs were also examined. Of the 18 residential learning communities and first year programs for which the Office of Institutional Research has data, the drop in retention was greater than the University average in nine of those:

- Batchelder Music Community (-9.7%)
- BGeX (-4.0%)
- Chapman Community (-3.8%)
- La Communidad (-4.4%)
- Literacy Serve and Learn (-8.8%)
- CMAI (-4.3%)
- Springboard (-4.2%)
- UNIV 131 (-21.7%)
- UPAS (-3.7%)

The Office of Institutional Research was charged with providing further analysis in an attempt to isolate possible causes of the decrease in retention and also to explain reasons why students who are retained do or do not achieve sophomore status. This report summarizes the findings from that analysis. It is important to note that all references to retention indicate the percent of Fall 2005 main campus new first year students who returned for the Fall 2006 semester.

In response to numerous inquiries and suggestions, data were obtained from a myriad of sources, and analyzed. The analysis considered the relationship between an array of new student characteristics and retention. Those relationships are discussed and analyzed in the following pages.

Results

Retention to Fall 2006

Demographic and Educational Variables

Bivariate analyses showing statistically significant differences only are arrayed below in Tables 3 through 20. Such differences were found for gender (Table 3); academic college (Table 4); living arrangements (Table 5); testing into developmental English (Table 6), developmental math (Table 7), and any developmental program (Table 8); enrolling in a developmental English class (Table 9), mathematics class (Table 10), or ACEN 100 (Table 11) participation in the Center for Multicultural and Academic Initiatives (Table 12); the President's Leadership Academy (Table 13); UNIV 131 (Table 14); the University Program for Academic Success (Table 15); the Honors residential program (Table 16); any residential learning community (Table 17); academic status after Fall 2005 (Table 18); retention to Spring 2006 (Table 19); and academic status after Spring 2006 (Table 20). Please note that there were no statistically significant differences in retention rates between students who did or did not test into ACEN 100.

Table 3 shows a statistically significant difference in retention between males and females, favoring females.

Table 3
Retention by Gender

	Retention		
Gender	Retained	Not Retained	χ^2
Females	1548 77.7%	443 22.3%	6.523*
Males	1181 74.1%	413 25.9%	

* $p < .05$.

Table 4 reveals a significant retention rate difference by college, with students in the College of Education and Human development best retained and those in Academic Enhancement lest well retained.

Table 4
Retention by Academic College

Academic College	Retention Retained	Not Retained	χ^2
Arts and Sciences	736 75.6%	238 24.4%	15.314*
Academic Enhancement	454 71.6%	180 28.4%	
Business Administration	403 77.5%	117 22.5%	
Education and Human Dev.	651 80.0%	163 20.0%	
Health and Human Svcs.	263 74.5%	90 25.5%	
Musical Arts	70 78.7%	19 21.3%	
Technology	152 75.6%	49 24.4%	

* $p < .05$.

Table 5 shows a statistically significant difference in living arrangements and retention. Those living on-campus had a higher retention rate than those living off-campus.

Table 5
Retention by Living Arrangements

Living Arrangement	Retention Retained	Not Retained	χ^2
On-campus	2500 76.6%	762 23.4%	5.332*
Off-Campus	229 70.9%	94 29.1%	

* $p < .05$.

Table 6 shows those students who did not test into the developmental English class were retained at a statistically significantly higher rate than those who did test into the developmental English class.

Table 6
Retention by Testing into Developmental English

	Retention		
Tested Into Dev Eng	Retained	Not Retained	χ^2
Yes	352 68.8%	160 31.3%	17.863**
No	2377 77.4%	696 22.6%	

** $p < .01$.

Table 7 shows those students who did not test into a developmental mathematics class were retained at a statistically significantly higher rate than those who did test into a developmental mathematics class.

Table 7
Retention by Testing into Developmental Math

	Retention		
Tested Into Dev Math	Retained	Not Retained	χ^2
Yes	260 70.5%	109 29.5%	7.255**
No	2469 76.8%	747 23.2%	

** $p < .01$.

Table 8 shows those students who did not test into any developmental class were retained at a statistically significant higher rate than those who did test into any developmental class.

Table 8
Retention by Testing into Any Developmental Program

	Retention		
Tested Into Any Dev Prog	Retained	Not Retained	χ^2
Yes	1017 71.9%	397 28.1%	22.651**
No	1712 78.9%	459 21.1%	

** $p < .01$.

Table 9 shows those students who did not enroll in a developmental English class were retained at a statistically significantly higher rate than those who did enroll in a developmental English class.

Table 9
Retention by Enrolled in Developmental English

	Retention		
Enr Dev English	Retained	Not Retained	χ^2
Yes	373 70.5%	156 29.5%	10.754**
No	2356 77.1%	700 22.9%	

** $p < .01$.

Table 10 shows those students who enrolled in a developmental math class were retained at a statistically significantly higher rate than those who did not.

Table 10
Retention by Enrolled in Developmental Math

	Retention		
Enr Dev Math	Retained	Not Retained	χ^2
Yes	1332 77.7%	383 22.3%	4.317*
No	1397 74.7%	473 25.3%	

* $p < .05$.

Table 11 shows those students who did not enroll in ACEN 100 were retained at a statistically significantly higher rate than those who did enroll in ACEN 100.

Table 11
Retention by Enrollment in ACEN 100

	Retention		
Enr ACEN 100	Retained	Not Retained	χ^2
Yes	187 69.8%	81 30.2%	6.419*
No	2542 76.6%	775 23.4%	

* $p < .05$.

Table 12 shows a statistically significant difference from students who were involved in the Center for Multicultural and Academic Initiatives (CMAI) versus those who were not involved in CMAI. The rate of retention favors those students who were involved in CMAI.

Table 12
Retention by Involvement in the Center for Multicultural and Academic Initiatives

	Retention		
Involved in CMAI	Retained	Not Retained	χ^2
Yes	308	75	4.352*
	80.4%	19.9%	
No	2421	781	
	75.6%	24.4%	

* $p < .05$.

Table 13 displays the statistically significant difference in retention for students participating in the President's Leadership Academy (PLA) versus those not involved in PLA, favoring those involved in PLA.

Table 13
Retention by Involvement in PLA

	Retention		
Involvement in PLA	Retained	Not Retained	χ^2
Yes	29	0	9.171**
	100.0%	0.0%	
No	2700	856	
	75.9%	24.1%	

** $p < .01$.

Table 14 displays the statistically significant difference in retention for students enrolled in UNIV 131-*Career and Life Planning* versus those not enrolled in UNIV 131, favoring those not enrolled in UNIV 131.

Table 14
Retention by Enrollment in UNIV 131

	Retention		
Involvement in UNIV 131	Retained	Not Retained	χ^2
Yes	53	31	8.032**
	63.1%	36.9%	
No	2676	825	
	76.4%	23.6%	

** $p < .01$.

Table 15 shows a statistically significant difference in retention for students participating in the University Program for Academic Success (UPAS) versus those not involved in UPAS, favoring those not involved in UPAS.

Table 15
Retention by Involvement in UPAS

	Retention		
Involvement in UPAS	Retained	Not Retained	χ^2
Yes	146	68	7.811**
	68.2%	31.8%	
No	2583	788	
	76.6%	23.4%	

** $p < .01$.

Table 16 displays the statistically significant difference in retention for students participating in the Honors residential program versus those not involved in Honors, favoring those involved in Honors.

Table 16
Retention by Involvement in the Honors Residential Program

	Retention		
Involvement in Honors	Retained	Not Retained	χ^2
Yes	218 92.0%	19 8.0%	35.122**
No	2511 75.0%	837 25.0%	

** $p < .01$.

Table 17 displays the statistically significant difference in retention for students enrolled in zero, one, or two residential learning communities, favoring those enrolled in one RLC.

Table 17
Retention by Involvement in Residential Learning Communities

	Retention		
Involvement in RLCs	Retained	Not Retained	χ^2
No RLC	2115 74.3%	730 25.7%	24.101**
1 RLC	601 83.0%	123 17.0%	
2 RLCs	13 81.3%	3 18.8%	

** $p < .01$.

Table 18 shows statistically significant difference in retention for students after Fall 2005, favoring those on the Dean's List. Please note that "No Status" indicates that students stopped their enrollment prior to the end of the fall semester.

Table 18
Retention by Academic Status After Fall 2005

	Retention		
Academic Status	Retained	Not Retained	χ^2
No Status	5 9.1%	50 90.9%	758.291**
Dean's List	560 91.1%	55 8.9%	
Good Standing	1820 82.9%	375 17.1%	
Probation	126 30.1%	293 69.9%	
Warning	218 72.4%	8 27.6%	

** $p < .01$.

Table 19 shows the statistically significant difference for students who returned to BGSU for the Spring 2006 semester, favoring those who did return for Spring 2006 classes.

Table 19
Retention by Returning for Spring 2006

	Retention		
Returned Spring 2006	Retained	Not Retained	χ^2
Yes	2710 82.4%	579 17.6%	862.444**
No	19 6.4%	277 93.6%	

** $p < .01$.

Table 20 shows, again, that retention favors those students on the Dean's List; this time for students after the Spring 2006 semester. Please note that "No Status" indicates that students stopped their enrollment prior to the end of the spring semester.

Table 20
Retention by Academic Status, End of Spring 2006

	Retention		
Academic Status, End S06	Retained	Not Retained	χ^2
No Status	31 9.4%	299 90.6%	1524.277**
Dean's List	656 92.9%	50 7.1%	
Good Standing	1726 88.4%	227 11.6%	
Probation	61 52.1%	56 47.9%	
Suspended, continuing	7 70.0%	3 30.0%	
Suspended	23 12.6%	160 87.4%	
Warning	225 78.7%	61 21.3%	

** $p < .01$.

Additionally, independent samples t-tests were conducted to determine if there were statistically significant differences in retention for Fall 2005 (15th day) credit hours enrolled, high school GPA, ACT score, GPA at the end of Fall 2005, number of credit hours at the end of Fall 2005, GPA at the end of Spring 2006, credit hours at the end of Spring 2006, social and academic adjustment, university involvement, satisfaction with living arrangements, and satisfaction with faculty (as determined by the New Student Transition Questionnaire). Only academic adjustment and satisfaction with faculty were found to not be statistically significant. Table 21 displays the remaining statistically significant results.

Table 21
Mean Differences – Students Who Returned or Did Not Return Fall 2006

	N	Mean	SD	MD	t (df)
Fall 2005 Current Hours					
Retained	2729	15.156	1.137	-0.169	-3.748 (3583)**
Not Retained	856	14.987	1.203		
High School GPA					
Retained	2689	3.292	0.496	-0.238	-12.348 (3533)**
Not Retained	846	3.054	0.465		
ACT Score					
Retained	2515	22.126	3.906	-1.005	-6.394 (3275)**
Not Retained	762	21.120	3.437		
GPA, End F05					
Retained	2724	2.902	0.784	-0.955	-26.842 (3528)**
Not Retained	806	1.946	1.173		
Credit Hours, End Fall 05					
Retained	2724	16.133	5.915	-4.412	-18.251 (3528)**
Not Retained	806	11.721	6.398		
GPA, End Sp06					
Retained	2698	2.886	0.716	-0.957	-26.063 (3253)**
Not Retained	557	1.929	1.074		
Credit Hours, End of Sp06					
Retained	2698	30.475	7.281	-8.576	-23.552 (3253)**
Not Retained	557	21.898	10.050		
Social Adjustment (NSTQ)					
Retained	1504	29.815	4.309	-1.293	-5.378 (1952)**
Not Retained	450	28.522	4.996		

University Involvement (NSTQ)					
Retained	1502	5.931	1.864	-0.461	-4.543 (1949)**
Not Retained	449	5.469	1.955		
Satisfied Living Arrangements (NSTQ)					
Retained	1484	12.000	2.356	-0.602	-4.621 (1924)**
Not Retained	442	11.398	2.553		

** $p < .01$.

Number of Courses Failed

Tests of significance were calculated on retention and the number of courses failed. Courses failed were characterized into total number of courses failed during the first year; number general education courses failed; and, number of BGeX courses failed. All three were statistically significant, as depicted in Tables 22-24. All three tables show results favoring students who did not fail a course, a general education class, or a BGeX course during their first year versus those students who did fail a course.

Table 22
Retention by Number of Courses Failed During the First Year

	Number of Courses Failed				
Retention	0	1	2	3	χ^2
Retained	2445 80.2%	242 53.7%	38 48.1%	4 66.7%	187.392**
Not Retained	604 19.8%	209 46.3%	41 51.9%	2 33.3%	

** $p < .01$.

Table 23
Retention by Number of General Education Courses Failed

	Number of General Education Courses Failed		
Retention	0	1	χ^2
Retained	2445 80.2%	284 53.0%	185.625**
Not Retained	604 19.8%	252 47.0%	

** $p < .01$.

Table 24
Retention by Number of BGeX Courses Failed

	Number of BGeX Courses Failed		
Retention	0	1	χ^2
Retained	2691	38	132.238**
	77.6%	31.9%	
Not Retained	775	81	
	22.4%	68.1%	

** $p < .01$.

Undecided Students

Table 25 displays the retention rate for undecided students, not in UPAS, as delineated by their college.

Table 25
Retention and Undecided Students by College

	College			
Retention	BA	A&S	BFA	HHS
Retained	153	67	4	14
	77.3%	72.0%	100.0%	70.0%
Not Retained	45	26	0	6
	22.7%	28.0%	0.0%	30.0%

Students at Risk of Attrition per the New Student Transition Questionnaire

Table 26 displays the retention rates of students considered "at risk" of attrition as defined by BGSU's New Student Transition Questionnaire (NSTQ). "At risk" is defined as those students who, based on a combination of responses to certain questions on the NSTQ and high school GPA, are identified as needing additional academic support. The "at risk" identifier was designed through analysis of previous cohorts, the academic characteristics of those cohorts, and responses to certain NSTQ questions in those students who were retained. Students who were determined to be not at risk were significantly more likely to be retained.

Table 26
NSTQ "At Risk" Students

Retention	At Risk	Not At Risk	χ^2
Retained	411 66.5%	2318 78.1%	38.003**
Not Retained	207 33.5%	649 21.9%	

** $p < .01$.

Athletic Aid and State of Residence

Additionally, tests of significance were performed on retention based on whether or not a student received athletic aid and the students' state of residence. Neither analysis was shown to be statistically significant.

Classes Taught by Faculty Type

Data were also examined to determine if statistically significant differences in retention existed based upon the percentage of classes taught by faculty members of different types. Faculty types were defined as: tenure track, non-tenure track, part-time, graduate assistants, adjunct, and unknown. Of classes taught by the various types of faculty, only one – non-tenure track – revealed a statistical significance. Table 27 shows the statistically significant results; students were more likely to be retained if they completed more classes taught by non-tenure-track full-time faculty members (i.e., instructors and lecturers).

Table 27
Group Differences in Retention by Faculty Type

	N	Mean	SD	t (df)
Non-Tenure Track				
Retained	2724	0.409	0.168	-2.063 (3528)*
Not retained	806	0.394	0.179	

* $p < .05$.

Financial Aid

Analyses were also conducted on retention by financial aid variables. As shown in Table 28, a statistically significant difference was found for students receiving: any type of gift aid; Federal Work Study; Expected Family Contribution; Gross Need; Unmet Need; and, Parent's Income. No other statistically significant results existed. The table shows retention results favoring students with higher mean gift aid, higher mean Federal Work Study aid, higher mean Expected Family Contribution, lower mean Gross Need, lower mean Unmet Need, and higher mean Parent Incomes.

Table 28
Group Differences in Retention by Type of Gift Aid

	N	Mean	SD	t (df)
Gift Aid				
Retained	2729	$5025	$6321	6.469 (3583)**
Not Retained	856	$3490	$5135	
Federal Work Study				
Retained	2729	$41	$271	3.497 (3583)**
Not Retained	856	$8	$79	
Expected Family Contribution				
Retained	2193	$13810	$15026	4.491 (2905)**
Not Retained	714	$11005	$12711	
Gross Need				
Retained	1951	$10824	$7553	-3.697 (2614)**
Not Retained	665	$12072	$7417	
Unmet Need				
Retained	2193	$2118	$3610	-13.715 (2905)**
Not Retained	714	$4555	$5404	
Parents' Income				
Retained	2154	$75100	$49211	4.729 (2845)**
Not Retained	693	$65405	$39078	

** $p < .01$.

Logistic regression analyses were also carried out to examine significant differences in retention rates according to students' receipt of various University scholarships, after controlling for high school grade point average. The scholarships examined in this analysis included:

- Falcon Soars
- Orange and Brown
- Eligibility for the Tuition Certainty Program

None of the results were significant, as shown in Table 29.

Table 29
Retention by Receipt of University Scholarships, After Controlling for High School GPA

Predictor	B	SE	Wald	Exp(B)
Falcon Soars	-0.262	0.144	3.297	0.769
Orange and Brown	-0.174	0.246	0.500	0.840
Tuition Certainty	0.457	1.077	0.180	1.579

Continuing with the financial aid analysis, tests of significance were also conducted on dependency status, as defined by the FAFSA and rate of retention. Data indicated no statistically significant difference between those students, for whom the University has FAFSA data, who indicated either dependent or independent and retention.

Number of Major Changes

Analysis was conducted examining the number of major changes a students had his/her rate of retention. As shown in Table 30, a statistically significant difference was shown for number of major changes and retention, favoring a greater number of major changes.

Table 30
Number of Major Changes

	Number of Major Changes				
Retention	0	1	2	3	χ^2
Retained	1846 71.7%	773 86.3%	100 95.2%	9 100.0%	102.179**
Not Retained	728 28.3%	123 13.7%	5 4.8%	0 0.0%	

** $p < .01$.

Residence Hall

A logistic regression analysis was used to examine retention differences by student residence hall, after controlling for high school grade point average. As shown in Table 31, a statistically significant difference existed for students living in Kohl, McDonald, and Kresicher Residence Halls. In other words, students living in the three aforementioned residence halls had a greater likelihood to return for Fall 2006, than those living in other residence halls.

Table 31
Retention by Residence Hall After Controlling for High School GPA

Predictor	B	SE	Wald	Exp(B)
Founders	0.269	0.317	0.721	1.308
French House	-1.282	0.931	1.897	0.278
Harshman	0.276	0.153	3.240	1.317
Kohl	0.575	0.212	7.357**	1.777
Kreischer	0.480	0.156	9.403**	1.616
McDonald	0.401	0.153	6.883**	1.493
Offenhauer	0.122	0.246	0.247	1.130
Rodgers	-0.025	0.525	0.002	0.975
Conklin	-0.002	-.240	0.000	0.998

** $p < .01$.

Table 32
Percent Retained by Residence Hall

	Returned Fall 2006	
	Yes	No
Lived in Kohl	192	46
	80.7%	19.3%
Did Not Live in Kohl	2537	810
	75.8%	24.2%
Lived in Kreischer	657	184
	78.1%	21.9%
Did Not Live in Kreischer	2072	672
	75.5%	24.5%
Lived in McDonald	738	214
	77.5%	22.5%

Did Not Live in McDonald	1991	642
	75.6%	24.4%

Disciplinary Activity

A logistic regression analysis was used to examine retention differences by whether students were subject to disciplinary action, either at the University or residence hall level, after controlling for high school grade point average. Table 33 shows a statistically significant difference in retention favoring students not subject to University-level discipline. Consequently, as the subsequent Table 34 shows, 76.7% of the students not on University-level discipline were retained.

Table 33
Retention by Level of Discipline Status After Controlling for High School GPA

Predictor	B	SE	Wald	Exp(B)
University Discipline	-0.597	0.203	8.619**	0.551
Res Life Discipline	0.017	0.096	0.030	1.017

** $p < .01$.

Table 34
Percent Retained by University-Level Discipline

	Returned Fall 2006	
	Yes	No
University-Level Disc.		
Yes	65	45
	59.1%	40.9%
No	2664	811
	76.7%	23.3%

Analysis by Time of Departure

Statistical tests were also conducted on the data to statistically significant differences between various independent variables and the time period of students' departure. Time of departure was delineated by not leaving; leaving between 15th day Fall and Fall grade week; leaving between Fall and Spring semesters; leaving between 15th day Spring and Spring grade week; and, leaving between Spring 2006 and Fall 2006 semesters.

The data were compared by gender; race/ethnicity; academic college; and residence hall. Statistical significance was found for all but race/ethnicity. Table 35 shows that the results favored females who did not leave. Table 36 shows results favoring Education and Human Development students who did not leave. Table 37 shows results favoring students who lived in Kohl, Kresicher, and McDonald residence halls who did not leave.

Table 35
Gender

	Gender		
When Left	Female	Male	χ^2
Did not leave	1532 76.9%	1163 73.0%	11.146*
Left between 15th day Fall and Fall grade week	33 1.7%	22 1.4%	
Left between Fall and Spring semesters	120 6.0%	128 8.0%	
Left between 15th day Spring and Spring grade week	15 0.8%	19 1.2%	
Left between Spring 06 and Fall 06 semesters	291 14.6%	262 16.4%	

* $p < .05$.

Table 36
Academic College

	Academic College							
When Left	A&S	ACE	BA	EAP	HHS	MUS	TECH	χ^2
Did not leave	727	444	302	642	263	68	149	41.809*
	74.6%	70.0%	77.3%	78.9%	74.5%	76.4%	74.1%	
Left between 15th day Fall and Fall grade week	15	13	6	8	5	3	5	
	1.5%	2.1%	1.2%	1.0%	1.4%	3.4%	2.5%	
Left between Fall and Spring semesters	64	58	24	55	30	5	12	
	6.6%	9.1%	4.6%	6.8%	8.5%	5.6%	6.0%	
Left between 15th day Spring and Spring grade week	18	4	3	7	1	0	1	
	1.8%	0.6%	0.6%	0.9%	0.3%	0.0%	0.5%	
Left between Spring 06 and Fall 06 semesters	150	115	85	102	54	13	34	
	15.4%	18.1%	16.3%	12.5%	15.3%	14.6%	16.9%	

* $p < .05$.

Table 37a
Where Student Lived (Conklin D to French House)

	Where Student Lived					
When Left	ConD	ConG	ConN	FQ	FH	χ^2
Did not leave	16	20	38	50	1	238.879**
	50.0%	64.5%	71.7%	72.5%	20.0%	
Left between 15th day Fall and Fall grade week	0	0	1	2	1	
	0.0%	0.0%	2.9%	2.9%	20.0%	
Left between Fall and Spring semesters	8	6	4	3	3	
	25.0%	19.4%	7.5%	4.3%	60.0%	
Left between 15th day Spring and Spring grade week	1	0	0	3	0	
	3.1%	0.0%	0.0%	4.3%	0.0%	
Left between Spring 06 and Fall 06 semesters	7	5	10	11	0	
	21.9%	16.1%	18.9%	15.9%	0.0%	

** $p < .01$.

Table 37b
Where Student Lived (Harshman-Anderson to Kresicher-Batchelder)

	Where Student Lived							
When Left	HA	HB	HC	HD	Kohl	KA	KB	χ^2
Did not leave	191	205	71	211	191	164	176	238.879**
	66.3%	73.7%	75.5%	86.1%	80.3%	77.0%	75.2%	
Left between 15th day Fall and Fall grade week	6	2	1	1	3	4	4	
	2.1%	0.7%	1.1%	0.4%	1.3%	1.9%	1.7%	
Left between Fall and Spring semesters	20	16	4	10	8	15	10	
	6.9%	5.8%	4.3%	4.1%	3.4%	7.0%	4.3%	
Left between 15th day Spring and Spring grade week	1	3	1	2	0	2	4	
	0.3%	1.1%	1.1%	0.8%	0.0%	0.9%	1.7%	
Left between Spring 06 and								

Fall 06 semesters	70	52	17	21	36	28	40
	24.3%	18.7%	18.1%	8.6%	15.1%	13.1%	17.1%

** p < .01.

Table 37c
Where Student Lived (Kresicher-Compton to McDonald West)

	Where Student Lived					
When Left	KC	KD	ME	MN	MW	χ^2
Did not leave	146	164	243	190	299	238.879**
	78.5%	78.8%	78.1%	80.2%	74.0%	
Left between 15th day Fall and Fall grade week	5	1	2	1	8	
	2.7%	0.5%	0.6%	0.4%	2.0%	
Left between Fall and Spring semesters	11	15	21	15	34	
	5.9%	7.2%	6.8%	6.3%	8.4%	
Left between 15th day Spring and Spring grade week	1	1	2	4	2	
	0.5%	0.5%	0.6%	1.4%	0.5%	
Left between Spring 06 and Fall 06 semesters	23	27	43	27	61	
	12.4%	13.0%	13.8%	11.4%	15.1%	

** p < .01.

Table 37d
Where Student Lived (Offenhauer East to Rodgers)

	Where Student Lived			
When Left	OffE	OffW	RQ	χ^2
Did not leave	18	65	12	238.879**
	69.2%	70.7%	66.7%	
Left between 15th day Fall and Fall grade week	0	2	0	
	0.0%	2.2%	0.0%	
Left between Fall and Spring semesters	4	5	3	
	15.4%	5.4%	16.7%	
Left between 15th day Spring				

and Spring grade week	1 3.8%	1 1.1%	0 0.0%
Left between Spring 06 and Fall 06 semesters	3 11.5%	19 20.7%	3 16.7%

** $p < .01$.

One-way ANOVAs were conducted to determine if a statistically significant difference existed in time of departure and mean high school GPAs, ACT scores, Fall 2005 GPA, and Spring 2006 GPA between. As displayed in Table 38-41, statistically significant difference were found for all four groups.

Table 38
One-way ANOVA for When a Student Left by High School GPA

	High School GPA		
	M	SD	F-stat
Did not leave	3.2952	0.49590	42.018**
Left between 15th day Fall and Fall grade week	3.0929	0.47998	
Left between Fall and Spring semesters	2.9895	0.44802	
Left between 15th day Spring and Spring grade week	3.0985	0.51797	
Left between Spring 06 and Fall 06 semesters	3.0752	0.46490	

** $p < .01$.

Table 39
One-way ANOVA for When a Student Left by ACT Score

	ACT Score		
	M	SD	F-stat
Did not leave	22.1372	3.90492	11.386**
Left between 15th day Fall and Fall grade week	22.0000	3.3333	
Left between Fall and Spring semesters	21.0372	3.38199	
Left between 15th day Spring and Spring grade week	21.3667	3.25347	
Left between Spring 06 and Fall 06 semesters	21.0640	3.50664	

** $p < .01$.

Table 40
One-way ANOVA for When a Student Left by Fall 2005 GPA

	Fall 2005 GPA		
	M	SD	F-stat
Did not leave	2.9123	0.77676	264.267**
Left between 15th day Fall and Fall grade week			
Left between Fall and Spring semesters	1.6955	1.28882	
Left between 15th day Spring and Spring grade week	1.9888	1.05613	
Left between Spring 06 and Fall 06 semesters	2.0590	1.09652	

** $p < .01$.

Table 41
One-way ANOVA for When a Student Left by Spring 2006 GPA

	Spring 2006 GPA		
	M	SD	F-stat
Did not leave	2.8393	0.83681	213.683**
Left between 15th day Fall and Fall grade week	2.2167	1.52934	
Left between Fall and Spring semesters	0.5000	0.70711	
Left between 15th day Spring and Spring grade week			
Left between Spring 06 and Fall 06 semesters	1.7680	1.22347	

** $p < .01$.

After determining a statistically significant difference between groups, post hoc tests were also calculated to determine which groups were significantly different. Since two groups (Fall 2005 GPA and Spring 2006 GPA) contained at least one group with fewer than two cases, they were excluded from the post hoc analysis. Based on high school GPA and ACT score, Tables 42-43 display the statistically significant mean differences when examining a student's high school GPA and when they left; and, a student's ACT score and when they left.

Table 42
Mean Difference Between High School GPA When a Student Left

High School GPA		Mean Difference
Did not leave	Left between 15th day Fall and Fall grade week	0.20229**
	Left between Fall and Spring semesters	0.30569**
	Left between 15th day Spring and Spring grade week	0.19667*
	Left between Spring 06 and Fall 06 semesters	0.21995**
Left between Fall and Spring semesters	Left between Spring 06 and Fall 06 semesters	-0.08574*

* p < .05; ** p < .01.

Table 43
Mean Difference Between ACT Score When a Student Left

ACT Score		Mean Difference
Did not leave	Left between Fall and Spring semesters	1.09996**
	Left between Spring 06 and Fall 06 semesters	1.07317**

** p < .01.

Multiple Regression

Multiple logistic regression results, shown in Table 44, revealed that, when gender and high school grade point average were controlled, students were more likely to return for their second fall if they returned for their first spring semester, if they had higher grade point averages after their first fall, if they failed no courses, if they were enrolled for a greater number of credit hours at the fifteenth day of classes for their first fall, if they had higher levels of federal work study, if they participated in the Center for Multicultural and Academic Initiatives, if they did not have any University-level disciplinary actions during their first year, and if they had higher levels of expected family financial contribution to the cost of college.

Table 44
Logistic Regression Results for Effects Upon One-Year Retention, After Controlling for Gender and High School GPA

Predictor	B	SE	Wald	Exp(B)
Returned S06	3.751	0.288	169.165**	42.560
GPA 1st Fall	0.741	0.083	80.513**	2.097
Courses Failed	-0.360	0.114	10.032**	0.698
SCH 1st Fall	0.039	0.013	8.682**	1.040
Federal Work Study	0.001	0.000	6.571*	1.001
CMAI	0.519	0.207	6.308*	1.680
University Discipline	-0.651	0.272	5.721*	0.522
Expected Family Cont.	0.000	0.000	4.986*	1.000
ACEN 100	0.159	0.123	1.682	1.172
Education and Human Dev	0.251	0.197	1.614	1.285
Living	0.193	0.200	0.927	1.212
UPAS	0.248	0.280	0.785	1.281
UNIV 131	-0.241	0.356	0.458	0.786
Musical Arts	-0.145	0.392	0.137	0.865
Business Administration	0.042	0.209	0.040	1.042
Gift Aid	0.000	0.000	0.035	1.000
Honors	0.056	0.307	0.033	1.057
Technology	0.045	0.278	0.026	1.046
Arts and Sciences	-0.026	0.186	0.019	0.975
Developmental English	0.020	0.153	0.018	1.021
Developmental Math	-0.017	0.174	0.009	0.983
Health and Human Services	0.007	0.231	0.001	1.007
PLA	18.797	7400.750	0.000	0.000
Current Hours	0.001	0.053	0.000	1.001

* P < .05. ** p < .01.

Sophomore vs. Freshman Status in Fall 2006

Additional analyses were conducted looking at the same student characteristics used in the retention alalyses, considering whether or not students had achieved sophomore status in the Fall 2006 semester.

As noted in Table 45, a statistically significance difference was found by gender for students who had attained sophomore status after the Spring 2006 semester, favoring females.

Table 45
Retention by Gender

	Student Status After Spring 2006		
Gender	Freshman	Sophomore	χ^2
Female	437	1101	49.752**
	28.4%	71.6%	
Male	486	689	
	41.4%	58.6%	

** $p < .01$.

Table 46 shows a statistically significance difference was found by race/ethnicity for students who had attained sophomore status after the Spring 2006 semester, favoring White students.

Table 46
Retention by Race/Ethnicity

	Student Status After Spring 2006		
Student of Color	Freshman	Sophomore	χ^2
Students of Color	230	258	46.444**
	47.1%	52.9%	
White	655	1463	
	30.9%	69.1%	

** $p < .01$.

A statistically significance difference was found by academic college for students who had achieved sophomore status for the Fall 2006 semester. Table 47 displays the significant results.

Table 47
Retention by Academic College

	Student Status After Spring 2006		
Academic College	Freshman	Sophomore	χ^2
A&S	240 33.0%	487 67.0%	53.852**
ACE	213 47.0%	240 53.0%	
BA	143 35.5%	260 64.5%	
EAP	178 27.5%	469 72.5%	
HHS	73 27.8%	190 72.2%	
MUS	19 27.5%	50 72.5%	
TECH	57 37.7%	94 62.3%	

** $p < .01$.

When examining the data for statistical significance regarding a student's status (freshman versus sophomore) after the Spring 2006 semester and whether or not they tested into developmental English, math, ACEN 100, or any developmental program, statistical significance was found for all four, favoring those who did not test into either developmental English, math, ACEN 100, or any developmental program. Tables 48-51 depict the significance.

Table 48
Retention by Testing into Development English

	Student Status After Spring 2006		
Tested into Dev Eng	Freshman	Sophomore	χ^2
Yes	177 50.4%	174 49.6%	48.342**
No	746 31.6%	1616 68.4%	

** $p < .01$.

Table 49
Retention by Testing into Development Mathematics

	Student Status After Spring 2006		
Tested into Dev Math	Freshman	Sophomore	χ^2
Yes	154 59.2%	106 40.6%	81.413**
No	769 31.1%	1684 68.7%	

** $p < .01$.

Table 50
Retention by Testing into ACEN 100

	Student Status After Spring 2006		
Tested into ACEN 100	Freshman	Sophomore	χ^2
Yes	297 40.9%	430 59.1%	20.648**
No	626 31.5%	1360 68.5%	

** $p < .01$.

Table 51
Retention by Testing into Any Developmental Program

	Student Status After Spring 2006		
Tested into Any Dev Prog	Freshman	Sophomore	χ^2
Yes	441	571	65.659**
	43.6%	56.4%	
No	482	1219	
	28.3%	71.7%	

** $p < .01$.

Analyses were also conducted to determine if a statistically significant difference existed for students who enrolled in developmental English, mathematics, or ACEN 100. Tables 52-53 show the results, which again favored those students who did not enroll in developmental English, math, or ACEN 100.

Table 52
Retention by Enrollment in Developmental English

	Student Status After Spring 2006		
Took Dev Eng	Freshman	Sophomore	χ^2
Yes	185	187	47.400**
	49.7%	50.3%	
No	738	1603	
	31.5%	68.5%	

** $p < .01$.

Table 53
Retention by Enrollment in ACEN 100

	Student Status After Spring 2006		
Took ACEN 100	Freshman	Sophomore	χ^2
Yes	102	85	37.690**
	54.5%	45.5%	
No	821	1705	
	32.5%	67.5%	

** $p < .01$.

Tests of statistical significance were also conducted for residential learning communities and other first year programs and student status (freshman or sophomore) after the Spring 2006 semester. Honors and Literacy Serve and Learn were found to be positively statistically significant, while SMART, Springboard, UNIV 100, and UPAS were found to be negatively statistically significant. In addition, involvement in any Residential Learning Community, any First Year Program and involvement in no first year program were also statistically significant. Tables 54-62 display the statistically significant results.

Table 54
Retention by Involvement in Honors

	Student Status After Spring 2006		
Involvement in Honors	Freshman	Sophomore	χ^2
Yes	9	204	91.422**
	4.2%	95.8%	
No	914	1586	
	36.3%	63.4%	

** $p < .01$.

Table 55
Retention by Involvement in Literacy Serve and Learn

	Student Status After Spring 2006		
Involvement in LSL	Freshman	Sophomore	χ^2
Yes	20	87	11.662**
	18.7%	81.3%	
No	903	1703	
	34.7%	65.3%	

** $p < .01$.

Table 56
Retention by Enrollment in SMART

	Student Status After Spring 2006		
Involvement in SMART	Freshman	Sophomore	χ^2
Yes	67	89	5.877*
	42.9%	57.1%	
No	856	1701	
	33.5%	66.5%	

* $p < .05$.

Table 57
Retention by Enrollment in Springboard

	Student Status After Spring 2006		
Involvement in Springboard	Freshman	Sophomore	χ^2
Yes	99 40.9%	143 59.1%	5.615*
No	824 33.3%	1647 66.7%	

* $p < .05$.

Table 58
Retention by Enrollment in UNIV 100

	Student Status After Spring 2006		
Involvement in UNIV 100	Freshman	Sophomore	χ^2
Yes	288 38.3%	464 61.7%	8.467**
No	635 32.4%	1326 67.6%	

* $p < .05$.

Table 59
Retention by Involvement in UPAS

	Student Status After Spring 2006		
Involvement in UPAS	Freshman	Sophomore	χ^2
Yes	109 74.7%	37 25.3%	113.513**
No	814 31.7%	1753 68.3%	

** $p < .01$.

Table 60
Retention by Involvement in Any Residential Learning Community

	Student Status After Spring 2006		
Involvement in Any RLC	Freshman	Sophomore	χ^2
No RLC	790	1316	51.342**
	37.5%	62.5%	
1 RLC	131	463	
	22.1%	77.9%	
2 RLCs	2	11	
	15.4%	84.6%	

** $p < .01$.

Table 61
Retention by Involvement in Any First Year Program

	Student Status After Spring 2006		
Involvement in Any FYP	Freshman	Sophomore	χ^2
No FYP	16	23	41.944**
	41.0%	59.0%	
1 FYP	331	843	
	28.2%	71.8%	
2 FYPs	419	725	
	36.6%	63.4%	
3 FYPs	148	178	
	45.4%	54.6%	
4 FYPs	9	19	
	32.1%	67.9%	
5 FYPs	0	2	
	0.0%	100.0%	

** $p < .01$.

Table 62
Retention by Involvement in No First Year Program

	Student Status After Spring 2006		
Involvement in No FYP	Freshman	Sophomore	χ^2
Yes	16	11	7.739**
	59.3%	40.7%	
No	907	1779	
	33.8%	66.2%	

** $p < .01$.

Table 63 shows that students on the Dean's List were more likely to have obtained sophomore status after Spring 2006.

Table 63
Retention by Academic Status

	Student Status After Spring 2006		
Academic Status	Freshman	Sophomore	χ^2
No Status	5	0	672.874**
	100.0%	0.0%	
Dean's List	25	525	
	4.15%	95.5%	
Good Standing	592	1224	
	32.6%	67.4%	
Probation	119	6	
	95.2%	4.8%	
Warning	182	35	
	83.9%	16.1%	

** $p < .01$.

Table 64 shows that students who had achieved sophomore status after Spring 2006 were more likely to return in Fall 2006.

Table 64
Retention by Returning Spring 2006

	Student Status After Spring 2006		
Returned Spring 2006	Freshman	Sophomore	χ^2
Yes	907 33.7%	1787 66.3%	21.472**
No	16 84.2%	3 15.8%	

** $p < .01$.

As shown in Table 65, there was also a statistically significant difference for retention by a student's academic status at the end of the Spring 2006 semester, favoring those on the Dean's List.

Table 65
Retention by Academic Status, End of Spring 2006

	Student Status After Spring 2006		
Academic Status, End S06	Freshman	Sophomore	χ^2
No Status	28 90.3%	3 9.7%	732.892**
Dean's List	37 5.7%	609 94.3%	
Good Standing	570 33.1%	1150 66.9%	
Probation	58 95.1%	3 4.9%	
Suspended, continuing	7 100.0%	O 0.0%	
Suspended	21 91.3%	2 8.7%	

Warning	202 89.8%	23 10.2%

** p < .01.

Differences in progression to sophomore status were also investigated according to whether students received the Orange and Brown, Falcon Soars, and Tuition Certainty Scholarships. As shown in Table 66, a statistically significant difference was found for students who received the Orange and Brown scholarship and whether or not they had obtained sophomore status after the Spring 2006 semester.

Table 66
Retention by Receipt of the Orange and Brown Scholarship

	Student Status After Spring 2006		
Orange and Brown	Freshman	Sophomore	χ^2
Yes	14 13.0%	94 87.0%	22.221**
No	909 34.9%	1696 65.1%	

** p < .01.

In addition to the above tests of significance, independent samples t-tests were conducted to determine if there is a statistically significant difference for current hours enrolled at 15th day for the first fall semster, high school GPA, ACT score, GPA at the end of Fall 2005, number of credit hours at the end of Fall 2005, GPA at the end of Spring 2006, credit hours at the end of Spring 2006, social and academic adjustment (as determined by the NSTQ), university involvement, satisfaction with living arrangements, and satisfaction with faculty. Only social adjustment, university involvement and satisfaction with living arrangements were found to not be statistically significant. Table 67 displays the remaining statistically significant results.

Table 67
Mean Differences – Students Who Returned as Sophomores by Fall 2006

	N	Mean	SD	MD	t (df)
Current Hours					
Soph	1790	15.299	1.100	0.424	9.357 (2711)**
Fresh	923	14.875	1.149		
High School GPA					
Soph	1770	3.440	0.460	0.444	24.198 (2671)**
Fresh	903	2.997	0.423		

ACT Score					
Soph	1674	22.866	3.935	2.314	14.563 (2499)**
Fresh	827	20.553	3.303		
GPA, End F05					
Soph	1790	3.209	0.577	0.907	34.170 (2706)**
Fresh	918	2.302	0.783		
Credit Hours, End Fall 05					
Soph	1790	17.719	5.676	5.058	25.103 (2706)**
Fresh	918	12.662	3.135		
GPA, End S06					
Soph	1787	3.184	0.535	0.902	38.263 (2680)**
Fresh	895	2.282	0.650		
Credit Hours, End of S06					
Soph	1787	33.311	5.758	9.027	41.112 (2680)**
Fresh	895	24.284	4.466		
Academic Adjustment					
Soph	950	10.661	2.494	0.728	5.377 (1499)**
Fresh	551	9.932	2.589		
Satisfaction with Faculty					
Soph	948	8.148	1.356	0.160	2.183 (1496)*
Fresh	550	7.988	1.412		

$p < .05$; ** $p < .01$.

Multiple logistic regression results, shown below in Table 68, revealed that, when gender, race/ethnicity, and high school grade point average were controlled, students were more likely to have achieved sophomore status if they completed a greater number of credit hours at fifteenth day of their first fall semester, completed their first fall with a higher grade point average, and participated in the UPAS program.

Table 68
Logistic Regression Results for Effects Upon Sophomore Status, After Controlling for Gender, Race/Ethnicity, and High School GPA

Predictor	B	SE	Wald	Exp(B)
SCH 1st Fall	-0.527	0.037	206.170**	0.591
GPA 1st Fall	-1.443	0.107	182.689**	0.236
UPAS	0.596	0.299	3.959*	1.815
Developmental English	0.283	0.164	2.980	1.327

Arts and Sciences	0.336	0.204	2.702	1.399
Literacy Serve & Learn	-0.586	0.365	2.585	0.556
Returned S06	-1.727	1.127	2.346	0.178
Musical Arts	0.626	0.438	2.042	1.870
Honors	-0.598	0.487	1.507	0.550
SMART	-0.315	0.268	1.377	0.730
UNIV 100	0.156	0.137	1.307	1.169
Springboard	0.233	0.207	1.265	1.262
Developmental Math	0.205	0.186	1.211	1.228
Business Administration	-0.246	0.226	1.190	0.782
ACEN 100	-0.102	0.130	0.620	0.903
Orange & Brown	0.233	0.356	0.427	1.262
Technology	-0.183	0.292	0.393	0.832
Health and Human Services	-0.084	0.263	0.102	0.919
Education and Human Dev	-0.029	0.211	0.019	0.971

* $p < .05$. ** $p < .01$.

Summary and Conclusions

Retention

Many of the results of the current study were consistent with other retention studies carried out by the Office of Institutional Research. Students were more likely to be retained to their second fall semester if they were female; had higher high school grade point averages and ACT scores; enrolled in a major in the College of Education and Human Development; were not in Academic Enhancement; lived on campus and specifically lived in Kohl, Kreisher, and MacDonald residence halls; did not test into or enroll in any developmental courses (except for enrolling in developmental mathematics); participated in the Center for Multicultural and Academic Initiatives or the President's Leadership Academy; were not enrolled in UNIV 131; did not participate in the UPAS program; participated in the Honors residential program and in any residential learning community; had higher grade point averages and greater credit hours earned and were in good academic standing after the fall and spring semesters; returned for their first spring semester; had greater social involvement, university involvement, satisfaction with living arrangements scores and were not identified as being at risk of attrition from the New Student Transition Questionnaire; did not fail any courses; had higher levels parent income and expected family contribution; had higher levels of gift aid and college work study; had no university-level disciplinary actions; and had lower levels of gross need and unmet need.

Two unexpected findings resulted from use of variables not included in previous studies: students were better retained if they enrolled in a greater number of first year classes taught by full-time non-tenure-track faculty members (instructors and lecturers) and if they changed their majors a greater number of times.

Multiple logistic regression results revealed that, when gender and high school grade point average were controlled, students were more likely to return for their second fall if they returned for their first spring semester, if they had higher grade point averages after their first fall, if they failed no courses, if they were enrolled for a greater number of credit hours at the fifteenth day of classes for their first fall, if they had higher levels of federal work study, if they participated in the Center for Multicultural and Academic Initiatives, if they did not have any University-level disciplinary actions during their first year, and if they had higher levels of expected family financial contribution to the cost of college.

Sophomore Status in Second Fall

Another set of analyses investigated the effects of several variables upon whether retained students had achieved sophomore status for their second fall or if they were still classified as freshmen. While not surprising, these effects were not previously empirically examined. Students who achieved sophomore status in their second fall were more likely to be female; Caucasian; to have majors in the Colleges of Education and Human Development or Musical Arts; had not tested into or enrolled in any developmental courses; had higher high school grade point averages and ACT scores; had higher grade point averages and student credit hours earned and were in good academic standing after their fall and spring semesters; returned for their first spring semester; were enrolled for a greater number of credit hours at the fifteenth day of classes

for their first fall; had greater academic adjustment and satisfaction with faculty scores from the New Student Transition Questionnaire; were more likely to have received the Orange and Brown Scholarship ; were more likely to participate in the Honors residential program or in any residential learning community; were more likely to participate in the Literacy Serve and Learn, UPAS, and not the SMART programs; and were more likely to enroll in the Springboard, UNIV and 100 courses.

Multiple logistic regression results revealed that, when gender, race/ethnicity, and high school grade point average were controlled, students were more likely to have achieved sophomore status if they were enrolled for a greater number of credit hours at fifteenth day of their first fall semester, completed their first fall with a higher grade point average, and participated in the UPAS program.

Conclusions

These results reveal that both students' background characteristics and college experiences influence their retention. Many of the findings were not unexpected; students are more likely to be retained if they are female, have better academic preparation, participate in enrichment programs, live on campus, have financial support, become better socially integrated into college life, and have positive academic experiences. Surprisingly, they were also better retained if they enrolled in a greater number of first year classes taught by instructors and lecturers (perhaps a reflection of teaching quality) and if they changed their majors a greater number of times (which may be a positive academic strategy). The study also validated many previous assumptions about which retained students achieve sophomore status; they are those that are female and Caucasian, have better academic preparation, participate in enrichment programs, have financial support, become better academically integrated into college life, and have positive academic experiences.

As was the case with previous retention studies carried out by the Office of Institutional Research in 1997, 2000, and 2002, and despite its comprehensive nature, no one clear indicator (or even several) exists that clearly isolates a single cause of the retention rate drop for 2005-2006. Nevertheless, some useful information clearly has resulted. The recommendations of the 2002 and 2006-2007 BGSU Retention Task Force reports and the plans of the Office of Student Academic Achievement are supported by this study. Student retention at BGSU is likely to be facilitated by better coordination of retention efforts and better information sharing, more widespread use of and coordination between attrition early warning indicators, more intrusive academic advising, better coordination and provision of developmental education, increased financial aid opportunities, better and earlier communication of academic expectations to students, and increased support for and student utilization of support services such as those offered by Academic Enhancement, the Office of Campus Involvement, the Counseling Center, the Office of Residence Life, and others.

Tinto (1987, pp. 138-140) suggests six principles of institutional action regarding student retention, all of which are validated by the current study:

1. Institutions should ensure that new students enter with or have the opportunity to acquire the skills needed for academic success.
2. Institutions should reach out to make personal contact with students beyond the formal domains of academic life.
3. Institutional retention actions should be systematic in character.
4. Institutions should start as early as possible to retain students.
5. The primary commitment of institutions should be to their students.
6. Education, not retention, should be the goal of institutional retention programs.

The Office of Institutional Research will continue to collect a variety of data on practices, policies, and perceptions which may affect student retention and will periodically update analytic studies such as this one. The office welcomes and invites comments and suggestions.

Reference

Tinto, V. (1987). *Leaving college: Rethinking the causes and cures of student attrition*. Chicago: The University of Chicago Press.