



**Fall 2009 First-time, Full-time,
Baccalaureate Degree-Seeking Students:
An Analysis of Student Retention**

Presentation to the Persistence to Graduation Committee

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Create a comparative analysis of students in the fall 2009 Graduation Rate Survey (GRS) cohort as they progress to year three.

DETERMINATION OF GROUPS

GROUP	FALL 2009	SPRING 2010	FALL 2010	FALL 2011	FALL 2012	TOTAL
A	✓					164
B	✓	✓				327
C	✓	✓	✓			285
D	✓	✓	✓	✓		167
E	✓	✓	✓	✓	✓	1,499
Total						2,442

Note: ✓ indicates enrollment during the semester. These are generalized patterns. Summer enrollment and inconsistent enrollment (i.e., dropping in and dropping out) in other terms was not considered.

PRE-COLLEGE VARIABLES

HIGH SCHOOL GRADE POINT AVERAGE (GPA)

High School Grade Point Average (GPA)									
Group	#	Mean	Minimum	Percentiles					Maximum
				10th	25th	50th	75th	90th	
A – students that did not return after the first semester (fall 2009)	164	3.24	1.86	2.67	2.89	3.23	3.60	3.88	4.00
B – students that did not return after the first spring semester (spring 2010)	327	3.28	2.08	2.67	2.97	3.27	3.62	3.83	4.00
C – students that did not return after the first year (fall 2010)	285	3.31	1.93	2.61	2.97	3.33	3.73	3.96	4.00
D – students that did not return after the second year (fall 2011)	167	3.38	1.94	2.83	3.08	3.37	3.75	3.98	4.00
E – students that were retained in the third year (fall 2012)	1,499	3.57	1.98	2.98	3.30	3.68	3.95	4.00	4.22

STATISTICALLY SIGNIFICANT COMPARISONS (HIGH SCHOOL GPA)

Statistically Significant* Pairwise of High School Grade Point Average (GPA)					
Group	A – students that did not return after the first semester (fall 2009) Mean = 3.24	B – students that did not return after the first spring semester (spring 2010) Mean = 3.28	C – students that did not return after the first year (fall 2010) Mean = 3.31	D – students that did not return after the second year (fall 2011) Mean = 3.38	E – students that were retained in the third year (fall 2012) Mean = 3.57
A – students that did not return after the first semester (fall 2009) Mean = 3.24				✓	✓
B – students that did not return after the first spring semester (spring 2010) Mean = 3.28					✓
C – students that did not return after the first year (fall 2010) Mean = 3.31					✓
D – students that did not return after the second year (fall 2011) Mean = 3.38	✓				✓
E – students that were retained in the third year (fall 2012) Mean = 3.57	✓	✓	✓	✓	

Pairwise comparisons are made by “row” minus “column”. Significant comparisons at the alpha = 0.05 level are indicated by ✓. A green ✓ indicates “row” minus “column” is positive. A red ✓ indicates that “row” minus “column” is negative.

AVERAGE ACT COMPOSITE SCORE

Group	#	Mean	Minimum	Average ACT Composite Score					Maximum
				Percentiles					
				10th	25th	50th	75th	90th	
A – students that did not return after the first semester (fall 2009)	164	23.64	17.00	20.00	21.00	23.00	25.00	29.00	34.00
B – students that did not return after the first spring semester (spring 2010)	327	23.09	16.00	19.00	21.00	22.00	25.00	28.00	35.00
C – students that did not return after the first year (fall 2010)	285	23.33	15.00	19.00	21.00	23.00	26.00	28.00	33.00
D – students that did not return after the second year (fall 2011)	167	23.58	16.00	19.00	21.00	23.00	26.00	29.00	35.00
E – students that were retained in the third year (fall 2012)	1,499	25.26	14.00	20.00	22.00	25.00	28.00	31.00	36.00

STATISTICALLY SIGNIFICANT COMPARISONS (AVERAGE ACT COMPOSITE SCORE)

Statistically Significant* Pairwise of Average ACT Composite Score						
Group	A – students that did not return after the first semester (fall 2009) Mean = 23.64	B – students that did not return after the first spring semester (spring 2010) Mean = 23.09	C – students that did not return after the first year (fall 2010) Mean = 23.33	D – students that did not return after the second year (fall 2011) Mean = 23.58	E – students that were retained in the third year (fall 2012) Mean = 25.26	
ROW →	A – students that did not return after the first semester (fall 2009) Mean = 23.64				✓	COLUMN ↓
	B – students that did not return after the first spring semester (spring 2010) Mean = 23.09				✓	
	C – students that did not return after the first year (fall 2010) Mean = 23.33				✓	
	D – students that did not return after the second year (fall 2011) Mean = 23.58				✓	
	E – students that were retained in the third year (fall 2012) Mean = 25.26	✓	✓	✓	✓	

Pairwise comparisons are made by “row” minus “column”. Significant comparisons at the alpha = 0.05 level are indicated by ✓. A green ✓ indicates “row” minus “column” is positive. A red ✓ indicates that “row” minus “column” is negative.

Group	First Generation Student ¹	
	Yes	No
A – students that did not return after the first semester (fall 2009)	25	139
B – students that did not return after the first spring semester (spring 2010)	44	283
C – students that did not return after the first year (fall 2010)	41	244
D – students that did not return after the second year (fall 2011)	28	139
E – students that were retained in the third year (fall 2012)	145	1354
Total	283	2,159

¹Data are self-reported on the Cooperative Institutional Research Program (CIRP).

Chi-Square test for association indicated that there **was** a statistically significant association (p-value < 0.001) between first generation student status and student retention group.

RACE/ETHNICITY

Group	Race/ethnicity				
	Nonresident ¹ Alien	Black	Hispanic	White	Other Minorities ²
A – students that did not return after the first semester (fall 2009)	1	14	8	135	6
B – students that did not return after the first spring semester (spring 2010)	1	46	6	258	16
C – students that did not return after the first year (fall 2010)	2	45	8	213	17
D – students that did not return after the second year (fall 2011)	2	23	6	131	5
E – students that were retained in the third year (fall 2012)	10	170	24	1,207	88
Total	16	298	52	1,944	132

Note: Data are self-reported.

¹Nonresident Alien is determined by citizenship status and not race/ethnicity.

²Other minorities Asians, American Indian/Alaskan Native, and Unspecified race.

Chi-Square test for association indicated that there **was not** a statistically significant association between race/ethnicity and student retention group.

Group	Gender	
	Male	Female
A – students that did not return after the first semester (fall 2009)	73	91
B – students that did not return after the first spring semester (spring 2010)	155	172
C – students that did not return after the first year (fall 2010)	136	149
D – students that did not return after the second year (fall 2011)	83	84
E – students that were retained in the third year (fall 2012)	722	777
Total	1,169	1,273

Note: Data are self-reported.

Chi-Square test for association indicated that there **was not** a statistically significant association between gender and student retention group.

Group	Indicated UofL as First Choice	
	Yes	No
A – students that did not return after the first semester (fall 2009)	88	76
B – students that did not return after the first spring semester (spring 2010)	163	164
C – students that did not return after the first year (fall 2010)	150	135
D – students that did not return after the second year (fall 2011)	89	78
E – students that were retained in the third year (fall 2012)	786	713
Total	1,276	1,166

Note: Data are self-reported on the Cooperative Institutional Research Program (CIRP).

Chi-Square test for association indicated that there **was not** a statistically significant association between the indication of UofL as their first choice and student retention group.

RESIDENCY STATUS

Group	Residency at Time of Admission*		
	In-state	Reciprocity	Out-of-State
A – students that did not return after the first semester (fall 2009)	125	16	23
B – students that did not return after the first spring semester (spring 2010)	261	27	39
C – students that did not return after the first year (fall 2010)	232	22	31
D – students that did not return after the second year (fall 2011)	130	17	20
E – students that were retained in the third year (fall 2012)	1,269	87	143
Total	2,017	169	256

*Chi-Square test for association indicated that there **was not** a statistically significant association between residency and student retention group.

TOP FIVE HIGH SCHOOLS

Top Five High Schools					
Group	A – students that did not return after the first semester (fall 2009)	B – students that did not return after the first spring semester (spring 2010)	C – students that did not return after the first year (fall 2010)	D – students that did not return after the second year (fall 2011)	E – students that were retained in the third year (fall 2012)
Out of State High School	45	71	57	40	247
DuPont Manual High School	1	8	7	3	79
Eastern High School	7	2	8	5	51
St. Xavier High School	0	1	5	7	46
Ballard High School	6	7	4	4	41

ACADEMIC VARIABLES

TOP FIVE ENTERING MAJORS

Group	Top Five Majors				
	A – students that did not return after the first semester (fall 2009)	B – students that did not return after the first spring semester (spring 2010)	C – students that did not return after the first year (fall 2010)	D – students that did not return after the second year (fall 2011)	E – students that were retained in the third year (fall 2012)
Undecided	59	122	92	50	415
Biology	21	30	15	11	174
Nursing	12	29	23	16	102
Psychology	8	22	16	10	57
Mechanical Engineering	5	14	5	5	53

ACADEMIC UNIT OF INITIAL ENROLLMENT

Academic Unit of Initial Enrollment					
Group	A – students that did not return after the first semester (fall 2009)	B – students that did not return after the first spring semester (spring 2010)	C – students that did not return after the first year (fall 2010)	D – students that did not return after the second year (fall 2011)	E – students that were retained in the third year (fall 2012)
College of Arts and Sciences	89	184	154	75	760
College of Business	27	49	38	26	206
School of Dentistry	1	3	6	2	14
College of Education and Human Development	16	24	25	21	129
School of Music	5	4	11	2	41
School of Nursing	13	29	23	16	102
JB Speed School of Engineering	13	34	28	25	247
Total	164	327	285	167	1,499

PERCENT OF GENERAL EDUCATION REQUIREMENT COMPLETED IN FALL 2009

Percentage of General Education Requirement Completed in Fall 2009									
Group	#	Mean	Minimum	Percentiles					Maximum
				10th	25th	50th	75th	90th	
A – students that did not return after the first semester (fall 2009)	164	53.79	14.29	42.86	42.86	57.14	57.14	71.43	100.00
B – students that did not return after the first spring semester (spring 2010)	327	53.65	14.29	42.86	42.86	57.14	57.14	71.43	100.00
C – students that did not return after the first year (fall 2010)	285	54.71	14.29	42.86	42.86	57.14	57.14	71.43	85.71
D – students that did not return after the second year (fall 2011)	167	54.32	14.29	42.86	42.86	57.14	57.14	71.43	100.00
E – students that were retained in the third year (fall 2012)	1,499	57.10	14.29	42.86	42.86	57.14	71.43	71.43	100.00

Methodology: Courses used were identified within the course catalog as being general education. The percentage of the general education requirement completed was calculated by dividing the total number of credit hours completed in general education courses by the 21 required credit hours.

DISTRIBUTION OF GRADES: D, F, OR W FOR ALL CLASSES

Distribution of grades of D, F, and W								
Group	#	Grades	Mean	Minimum	Percentiles			Maximum
					50th	75th	90th	
A – students that did not return after the first semester (fall 2009)	164	D	0.32	0.00	0.00	0.00	1.00	3.00
		F	1.91	0.00	1.00	4.00	5.00	8.00
		W	1.09	0.00	0.00	1.00	4.00	9.00
B – students that did not return after the first spring semester (spring 2010)	327	D	0.97	0.00	1.00	2.00	2.00	6.00
		F	2.80	0.00	2.00	5.00	7.00	10.00
		W	0.98	0.00	0.00	1.00	3.00	7.00
C – students that did not return after the first year (fall 2010)	285	D	1.44	0.00	1.00	2.00	3.00	6.00
		F	2.96	0.00	2.00	5.00	7.00	13.00
		W	1.35	0.00	1.00	2.00	4.00	9.00
D – students that did not return after the second year (fall 2011)	167	D	1.60	0.00	1.00	2.00	4.00	6.00
		F	2.00	0.00	1.00	3.00	5.00	9.00
		W	1.55	0.00	1.00	2.00	4.00	14.00
E – students that were retained in the third year (fall 2012)	1,499	D	1.13	0.00	1.00	2.00	3.00	15.00
		F	0.92	0.00	0.00	1.00	3.00	13.00
		W	1.18	0.00	1.00	2.00	3.00	15.00

STATISTICALLY SIGNIFICANT COMPARISONS: GRADE OF D

		Statistically Significant* Pairwise Comparisons (Grade of D)				
Group		A – students that did not return after the first semester (fall 2009) Mean = 0.32	B – students that did not return after the first spring semester (spring 2010) Mean = 0.97	C – students that did not return after the first year (fall 2010) Mean = 1.44	D – students that did not return after the second year (fall 2011) Mean = 1.60	E – students that were retained in the third year (fall 2012) Mean = 1.13
ROW →	A – students that did not return after the first semester (fall 2009) Mean = 0.32		✓	✓	✓	✓
	B – students that did not return after the first spring semester (spring 2010) Mean = 0.97	✓		✓	✓	
	C – students that did not return after the first year (fall 2010) Mean = 1.44	✓	✓			✓
	D – students that did not return after the second year (fall 2011) Mean = 1.60	✓	✓			✓
	E – students that were retained in the third year (fall 2012) Mean = 1.13	✓		✓	✓	

COLUMN
↓

Pairwise comparisons are made by “row” minus “column”. Significant comparisons at the alpha = 0.05 level are indicated by ✓. A green ✓ indicates “row” minus “column” is positive. A red ✓ indicates that “row” minus “column” is negative.

STATISTICALLY SIGNIFICANT COMPARISONS: GRADE OF F

Statistically Significant* Pairwise Comparisons (Grade of F)					
Group	A – students that did not return after the first semester (fall 2009) Mean = 1.91	B – students that did not return after the first spring semester (spring 2010) Mean = 2.80	C – students that did not return after the first year (fall 2010) Mean = 2.96	D – students that did not return after the second year (fall 2011) Mean = 2.00	E – students that were retained in the third year (fall 2012) Mean = 0.92
A – students that did not return after the first semester (fall 2009) Mean = 1.91		✓	✓		✓
B – students that did not return after the first spring semester (spring 2010) Mean = 2.80	✓			✓	✓
C – students that did not return after the first year (fall 2010) Mean = 2.96	✓			✓	✓
D – students that did not return after the second year (fall 2011) Mean = 2.00		✓	✓		✓
E – students that were retained in the third year (fall 2012) Mean = 0.92	✓	✓	✓	✓	

Pairwise comparisons are made by “row” minus “column”. Significant comparisons at the alpha = 0.05 level are indicated by ✓. A green ✓ indicates “row” minus “column” is positive. A red ✓ indicates that “row” minus “column” is negative.

STATISTICALLY SIGNIFICANT COMPARISONS: GRADE OF W

Statistically Significant* Pairwise Comparisons (Grade of W)					
Group	A – students that did not return after the first semester (fall 2009) Mean = 1.09	B – students that did not return after the first spring semester (spring 2010) Mean = 0.98	C – students that did not return after the first year (fall 2010) Mean = 1.35	D – students that did not return after the second year (fall 2011) Mean = 1.55	E – students that were retained in the third year (fall 2012) Mean = 1.18
A – students that did not return after the first semester (fall 2009) Mean = 1.09					
B – students that did not return after the first spring semester (spring 2010) Mean = 0.98				✓	
C – students that did not return after the first year (fall 2010) Mean = 1.35					
D – students that did not return after the second year (fall 2011) Mean = 1.55		✓			
E – students that were retained in the third year (fall 2012) Mean = 1.18					

Pairwise comparisons are made by “row” minus “column”. Significant comparisons at the alpha = 0.05 level are indicated by ✓. A green ✓ indicates “row” minus “column” is positive. A red ✓ indicates that “row” minus “column” is negative.

“GATE KEEPER” BIOLOGY COURSES: DISTRIBUTION OF GRADES: D, F, W

Course	Grade	Grade Distribution: D, F, W					Total	
		A – students that did not return after the first semester (fall 2009)	B – students that did not return after the first spring semester (spring 2010)	C – students that did not return after the first year (fall 2010)	D – students that did not return after the second year (fall 2011)	E – students that were retained in the third year (fall 2012)		
BIOL102	D	1	16	13	11	31	72	72% earned by students <u>not</u> retained
	F	6	42	14	3	11	76	
	W	4	9	6	1	8	28	
Total		11	67	33	15	50	176	
BIOL104	D	1	8	3	8	10	30	61% earned by students <u>not</u> retained
	F	1	10	6	1	8	26	
	W	1	11	18	4	28	62	
Total		3	29	27	13	46	118	
BIOL240	D	1	13	9	5	53	81	47% earned by students <u>not</u> retained
	F	9	16	16	7	33	81	
	W	10	8	14	7	45	84	
Total		20	37	39	19	131	246	
BIOL242	D	1	9	9	3	43	65	39% earned by students <u>not</u> retained
	F	4	9	8	1	18	40	
	W	1	5	3	1	22	32	
Total		6	23	20	5	83	137	
BIOL244	D	0	2	3	1	15	21	28% earned by students <u>not</u> retained
	F	1	3	2	0	14	20	
	W	0	2	1	0	10	13	
Total		1	7	6	1	39	54	

TRANSFERS TO ANOTHER INSTITUTION

NATIONAL STUDENT CLEARINGHOUSE

The names of students not returning to UofL were submitted to the National Student Clearinghouse (NSC) Student Tracker.

518 students (approximately 55% of non-returning students) were identified as having subsequent enrollment at another institution.

TYPE OF INSTITUTION: SUBSEQUENT ENROLLMENT

Group	Type of Institution		Total
	2-year	4-year	
A – students that did not return after the first semester (fall 2009)	53	63	116
B – students that did not return after the first spring semester (spring 2010)	136	106	242
C – students that did not return after the first year (fall 2010)	64	40	104
D – students that did not return after the second year (fall 2011)	34	22	56
E – students that were retained in the third year (fall 2012)	N/A	N/A	N/A
Total	287 (55% of 518)	231 (45% of 518)	518

Source: National Student Clearinghouse Student Tracker

Chi-Square test for association indicated that there **was not** a statistically significant association between the type of institution in which students subsequently enrolled and student retention group.

TOP FIVE TRANSFER-OUT INSTITUTIONS

Top Five Transfer Institutions						
Group	A – students that did not return after the first semester (fall 2009)	B – students that did not return after the first spring semester (spring 2010)	C – students that did not return after the first year (fall 2010)	D – students that did not return after the second year (fall 2011)	E – students that were retained in the third year (fall 2012)	Percent of total students (n = 518) identified as having subsequent enrollment
Jefferson Community and Technical College	16	69	37	10	N/A	25.5%
Indiana University Southeast	13	16	5	1	N/A	6.8%
Elizabethtown Community College	4	11	7	1	N/A	4.4%
University of Kentucky	7	12	4	0	N/A	4.4%
Northern Kentucky University	5	12	3	0	N/A	3.9%

Source: National Student Clearinghouse Student Tracker

MAJOR OF THOSE EARNING A BACHELOR'S DEGREE AT TRANSFER-OUT INSTITUTION

Bachelor's Degrees Earned at Transfer-Out Institutions			
	A – students that did not return after the first semester (fall 2009)	B – students that did not return after the first spring semester (spring 2010)	C – students that did not return after the first year (fall 2010)
Anthropology	1	1	0
Biology	1	0	0
Business Economics	2	0	1
Catholic Studies	0	1	0
Communication	0	2	0
Criminal Justice	0	1	0
Dance	0	1	0
Film	0	0	1
Health Science	1	0	0
History	0	1	1
Journalism	0	2	0
Management	0	1	0
Marketing	0	1	0
Mechanical Engineering	0	1	0
Media Informatics	0	0	1
Nutrition	0	0	1
Political Science	2	1	1
Psychology	0	0	1
Public Health	0	1	0
Social Work	0	1	0
Spanish	0	1	0
Special Education	1	0	0
Sport Management	0	1	0
Wildlife and Conversation	0	0	1
Total	8	18	8

THANK YOU!