



# **UK Institutional Research Brief:**

## *An Evaluation of Residence Life's Living Learning Program*

Fall 2011

This study examines the characteristics of the first-time freshman participants in Living Learning Programs (LLP) and compares them with first-time freshman students from the same cohorts who did not participate in an LLP. First, enrollment files were used to examine the high school academic preparation, UK retention rates, and grade point averages for the Fall 2008, Fall 2009, Fall 2010 and Fall 2011 cohorts. Then, responses from the 2009 administration of the National Survey of Student Engagement (NSSE) were disaggregated for the fall 2008 cohort using lists of students participating in Living Learning Programs provided by the Office of Residence Life. The main focus was placed on the NSSE scales instead of individual questions due to a small sample of LLP students responding to the NSSE survey (n=56). Finally, students' responses on the spring Freshman Survey of 2009 and 2010 were used to examine the experiences of first-year students in and outside of the LLP.

### **Characteristics of Freshman Participants of LLP**

Freshmen participation in Living Learning Programs steadily increased during the study period, from 202 in the Fall 2008 (about 5% of the cohort), to 471 in the Fall 2011 (about 12% of the cohort). Appendix A presents the enrollments of first-time, first-year students in specific Living Learning Programs from Fall 2008 to Fall 2011.

**Table 1. LLP Participation by Freshman Cohort**

Beginning Term	No LLP Participation	LLP Participation	Cohort Total
Fall 2008	3,877	202	4,079
Fall 2009	3,901	210	4,111
Fall 2010	3,989	294	4,283
Fall 2011	3,611	471	4,082

Examination of enrollment files revealed that first-year students who participated in Living Learning Programs differed significantly from non-LLP students on high school academic characteristics. Table 2 shows LLP students had significantly higher average high school GPA and ACT scores in each of the four cohorts (p-values <0.001). LLP students also differed on demographic characteristics from their non-LLP peers, but most of the differences became

smaller over time. In 2008, the beginning of the study period, the percentage of males among the LLP students was higher than in the freshman cohort (56.9% vs. 48.4%), but it declined over time and in 2011 became comparable (46.9% vs. 46.6%). First-generation students were underrepresented in LLP until the First-Generation Living Learning Program was initiated in 2011. Out-of-state students were somewhat underrepresented in Living Learning Programs throughout the study period; the percent of Black students varied from year to year, but on average (for combined cohorts) was comparable to the percent in the freshman cohorts.

**Table 2. Demographic Characteristics of First-Year Students: LLP vs. Other (non-LLP)**

	<b>Cohort Fall 2008 (N=4079)</b>		<b>Cohort Fall 2009 (N=4111)</b>		<b>Cohort Fall 2010 (N=4283)</b>		<b>Cohort Fall 2011 (N=4082)</b>		<b>Combined Cohorts 2008, 2009, 2010</b>	
<b>Characteristic</b>	<b>LLP (N=202)</b>	<b>Other (N=3977)</b>	<b>LLP (N=210)</b>	<b>Other (N=3901)</b>	<b>LLP (N=294)</b>	<b>Other (N=3989)</b>	<b>LLP (N=471)</b>	<b>Other (N=3611)</b>	<b>LLP (N=706)</b>	<b>Other (N=11767)</b>
<b>HS Academics</b>										
High School GPA	3.65	3.51	3.90	3.50	3.86	3.58	3.92	3.59	3.81	3.53
ACT	26.1	24.3	28.8	24.5	27.7	25.0	28.0	25.1	27.6	24.6
<b>Sex</b>										
Percent Male	56.9%	48.4%	53.8%	48.5%	47.6%	48.6%	46.9%	46.6%	52.1%	48.5%
Percent Female	43.1%	51.6%	46.2%	51.5%	52.4%	51.4%	53.1%	53.4%	47.9%	51.5%
<b>Race</b>										
Percent Black	14.9%	8.1%	3.3%	10.1%	7.1%	8.5%	4.9%	8.9%	8.2%	8.9%
Percent White	78.7%	84.6%	88.1%	82.6%	81.0%	78.9%	81.7%	80.5%	82.4%	82.0%
Percent Other	6.4%	7.3%	8.6%	7.3%	11.9%	12.6%	13.4%	10.6%	9.4%	9.1%
<b>First-Generation</b>	15.8%	17.4%	12.4%	17.7%	15.7%	23.8%	25.5%	22.1%	14.7%	19.7%
<b>Residency Status</b>										
Percent In-state	85.2%	76.0%	80.0%	78.2%	82.0%	76.1%	81.3%	73.1%	82.3%	76.8%
Percent Out-of-State	14.9%	24.0%	20.0%	21.8%	18.0%	23.9%	18.7%	27.0%	17.7%	23.3%

### UK Retention Rates and GPA

Our analysis found students who participated in Living Learning Programs were more academically successful than their corresponding cohort peers (see Table 3). LLP students had higher first fall GPA, first year GPA, 1<sup>st</sup> to 2<sup>nd</sup> fall retention and 1<sup>st</sup> to 3<sup>rd</sup> fall retention (p-

values<0.01, except for 1<sup>st</sup> to 2<sup>nd</sup> fall retention for the 2008 cohort where the difference was not statistically significant, p=0.28). Since high school academic variables are strong predictors of students' UK academic performance, the differences in UK academic variables between LLP participants and non-LLP students needed to be adjusted for high school GPA and ACT in order to better measure the effect of the LLP upon academic performance at UK. The adjustments were based on linear regression for the GPA variables and logistic regression for the retention rates.

For the combined cohorts 2008, 2009, and 2010, the average GPA, as well as the retention rate differences, decreased after adjustment but remained significant. The difference in the first fall average GPA decreased from 0.46 (3.26-2.80) to 0.19, and the first year average GPA difference decreased from 0.42 to 0.11, but remained significant (p-values<0.001). The adjusted difference in the 1<sup>st</sup> to 2<sup>nd</sup> fall retention rate was 3.4% (p-value=0.0373) compared to the unadjusted difference of 7.6% (88.4%-80.8%). And the 1<sup>st</sup> to 3<sup>rd</sup> fall adjusted retention rate difference was 6.2% (p-value<0.001) compared to the unadjusted difference of 12.5%.

**Table 3. Retention Rates and Average GPA of First-Year Students: LLP vs. Other (non-LLP)**

	Cohort Fall 2008 (N=4079)		Cohort Fall 2009 (N=4111)		Cohort Fall 2010 (N=4283)		Combined Cohorts 2008, 2009, 2010	
	LLP (N=202)	Other (N=3977)	LLP (N=210)	Other (N=3901)	LLP (N=294)	Other (N=3989)	LLP (N=706)	Other (N=11767)
<b>UK Academics</b>								
First Fall GPA	3.00	2.76	3.41	2.79	3.33	2.86	3.26	2.80
First Year GPA	2.92	2.74	3.35	2.76	3.28	2.83	3.20	2.78
1st fall to 2nd fall retention	83.2%	80.1%	91.9%	81.2%	89.5%	80.9%	88.4%	80.8%
1st fall to 3rd fall retention	79.7%	70.6%	86.7%	71.1%			83.3%*	70.8%*

\* Cohorts 2008 and 2009 only

### Results from the National Survey of Student Engagement

The University of Kentucky has participated biennially in National Survey of Student Engagement (NSSE) since 2001. The analysis described below was based on students' responses to the NSSE 2009 questionnaire. A total of 1,068 UK freshmen students participated in the survey. Only 56 of these students were LLP participants. The students were from the fall 2008 cohort.

Items on NSSE are clustered into five benchmarks of effective educational practices: 1) level of academic challenge, 2) active and collaborative learning, 3) student-faculty interaction, 4) enriching educational experiences, and 5) supportive campus environment. Table 4 shows the average NSSE scale scores for active and collaborative learning and enriching educational experiences were higher for students in LLP than for freshmen who did not participate in this

program. The difference for student-faculty interaction favored LLP students, but was not statistically significant. LLP students did not differ from their cohort peers on the supportive campus environment scale, and they averaged lower scores on the academic challenge benchmark.

**Table 4 – Average NSSE Benchmark Scores for LLP participants**

NSSE Scale		N	Mean	Difference	t-statistic	p-value
Academic Challenge	LLP	54	51.00			
	Other	958	54.11	-3.11	-2.24	0.028
Active and Collaborative Learning	LLP	56	45.94			
	Other	1009	40.45	5.49	2.56	0.011
Student-Faculty Interaction	LLP	54	36.52			
	Other	961	33.99	2.53	1.05	0.294
Enriching Educational Experiences	LLP	52	32.51			
	Other	938	27.51	5.00	2.70	0.007
Supportive Campus Environment	LLP	52	58.28			
	Other	919	59.91	-1.63	-0.79	0.434

### **Results from the Spring Survey of First-Year Experiences**

The data from two freshman surveys, spring 2009 and spring 2010, were combined for the analysis since the same questionnaire was used in both years. A total of 1,976 freshmen participated in the surveys. Of these, 137 students were enrolled in Living Learning Programs.

The following comparisons between LLP students and their non-LLP peers were statistically significant based on a chi-square analysis.

#### **UK academics**

- 87.6% of LLP participants reported declaring a major during their first year at UK, compared to 75.6% of non-LLP students (p-value=0.001);
- 54.0% of LLP students enrolled in an Honors course, compared to 13.5% of non-LLP students (p<0.001);
- 29.9% of LLP respondents enrolled in a Freshman Discovery Seminar, compared to 9.6% for non-LLP group (p<0.001);

- 63.0% of LLP students *agreed or strongly agreed* with the statement “I find my academic work interesting and absorbing”, compared to 51.2% of non-LLP students ( $p=0.01$ ); and
- 85.6% of LLP students reported *being successful or very successful* in adjusting to academic demands of college, compared to 71.7% of non-LLP students ( $p<0.001$ ).

### Interactions with faculty

- 64.4% of LLP students *agreed or strongly agreed* with “My non-classroom interactions with faculty have had a positive influence on my career goals and aspirations,” compared to 49.8% for non-LLP students ( $p=0.014$ );
- 49.8% of LLP students *agreed or strongly agreed* with “My non-classroom interactions with faculty have had a positive influence on my personal growth, values and attitudes,” compared to 42.1% for non-LLP students ( $p=0.024$ );
- 63.8% of the LLP students *disagreed or strongly disagreed* with “Few of the faculty members I have had contact with are genuinely interested in students,” compared to 35.8% of non-LLP students ( $p<0.001$ ); and
- 53.4% of LLP students reported *being successful or very successful* in establishing meaningful connections with faculty, compared to 38.2% of non-LLP students ( $p=0.004$ ).

### Academic Self-confidence

- 38.8% *strongly agreed* with “I usually do well in school and at academic tasks,” compared to 19.4% of non-LLP students ( $p<0.001$ );
- 24.6% *strongly agreed* with “My academic experience has had a positive influence on my intellectual growth and interest in ideas,” compared to 12.8% for non-LLP students ( $p=0.002$ );
- 26.1% *strongly agreed* (75.4% *agreed or strongly agreed*) with “I am a good student,” compared to 13.3% (63.7%) of non-LLP students ( $p<0.001$ );
- 58.2% *strongly agreed* with “I am very capable of succeeding at UK”, compared to 42.7% of non-LLP students ( $p=0.009$ );

When asked to rate themselves on:

- *academic ability*, 46.6% of LLP students selected “Highest 10%”, while only 17.7% of non-LLP students selected that rating category ( $p<0.001$ );

- *drive to achieve*, 46.2% of LLP students selected “Highest 10%”, while only 24.2% of non-LLP students selected that rating category ( $p<0.001$ );
- *intellectual self-confidence*, 36.8% of LLP students selected “Highest 10%”, while only 17.1% of non-LLP students selected that rating category ( $p<0.001$ ); and

### Interactions with students

- 44.7% of LLP students reported having serious talks with students whose religious or political beliefs were very different from theirs, compared to 27.5% of non-LLP students ( $p<0.001$ );
- 84.3% of LLP respondents reported developing close personal relationships with other students since coming to UK, compared to 74.4% of non-LLP students ( $p=0.014$ );
- 88.1% of LLP students were *successful or very successful* in developing close friendships with students, compared to 75.5% of non-LLP students ( $p=0.014$ ); and
- When asked to rate themselves on *social self-confidence*, no significant differences were found between the two groups of students.

### Personal Problems

- *Homesickness*: 76.5% of LLP students reported *never or rarely* feeling homesick compared to 61.8% of non-LLP students ( $p=0.007$ ); and
- *Financial difficulties*:
  - 15.2% of LLP students reported having serious financial difficulties, compared to 27.8% of non-LLP students ( $p=0.006$ )
  - 57.6% of LLP students were not concerned and only 11.4% were very concerned with their ability to pay for remaining college education, while the corresponding percentages were 34.7% and 21.7% for the other group ( $p<0.001$ )

### Summary of Key Findings

First-year students participating in Living Learning Programs were more academically prepared for college than their cohort peers. Their average high school GPA and ACT scores were significantly higher. Since the high school GPA and ACT scores are strong predictors of first-years students’ academic performance, it is not surprising that LLP students had higher first-

semester and first-year GPAs and higher retention rates. Adjusting for the high school academic variables decreased the differences by about a half, but they remained significant. The stronger performance of the LLP students may be a result of additional opportunities offered to these students.

Based on the 2009 NSSE data, the LLP freshmen scored significantly higher on the Active and Collaborative Learning and Enriching Educational Experiences scales, which is consistent with the goals of Living Learning Programs. They also scored higher on the Student-Faculty interaction, but the difference was not statistically significant.

The results of UK's Survey of First-year Experiences support the above findings related to academic performance and interactions with students and faculty. LLP participants were more likely to: declare a major during their freshman year; find their academic work interesting; and be successful in adjusting to academic demands of college. They reported greater academic self-confidence and more meaningful interaction with faculty. In this regard, LLP students also reported that faculty had a greater effect on their career goals and aspirations, their personal growth, and value and attitudes. Finally, freshmen enrolled in the Living Learning program reported more interaction with diverse students and were more likely to develop close friendships or personal relationships with other students.

## Appendix A

### Participation of First-year Student by Living Learning Program

Program participation by LLP first-time first-year students					
LL Program	Beginning term (fall)				
Frequency	2008	2009	2010	2011	Total
A&S wired	0	0	0	160	160
Agriculture	0	0	34	29	63
CREED	2	0	0	0	2
Civic Engagement	14	8	0	0	22
Engineering	5	1	52	67	125
Explorer	14	2	0	0	16
Fine Arts	24	23	28	18	93
First Generation	0	0	0	42	42
Global Scholars	0	0	9	12	21
Global Village	20	19	12	10	61
Green	8	0	0	0	8
Honors	24	61	65	54	204
Leadership	0	0	15	10	25
MA Science Cohort	23	11	4	0	38
New Economy	43	35	0	0	78
Nursing	0	0	20	13	33
ROTC	6	9	13	11	39
SEAM	0	20	21	17	58
Wellness	19	21	21	28	89
<b>Total</b>	<b>202</b>	<b>210</b>	<b>294</b>	<b>471</b>	<b>1177</b>