First-Year Learning Communities

Impact on First to Second Year Retention
Fall 2007 Cohort

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Abstract

The fall 2007 program evaluation of first-year learning communities (FYLC) is modeled after the fall 2006 report. The following analysis compares entering freshmen in fall 2007 who participated in a FYLC to non-participants. Results of this evaluation show that participating in a FYLC continues to significantly affect retention, and notably boost a student's probability of being retained by four percentage points. These results are comparable to last year's findings.

Introduction

The fall 2007 evaluation analyzing the impact of participating in a first-year learning community (FYLC) is a follow-up to last year's analysis. Both examine the likelihood of a student being retained based on his or her participation in a learning community. Approximately 37% of all entering freshmen participated in a FYLC in fall 2007, compared to 33% in fall 2006.

First-year learning communities assemble smaller groups of freshmen into a cluster of 20-30 students; each cluster enrolls in the same schedule of two or three core courses which are organized according to a theme, academic major or discipline[1]. Each college offers a different set of courses and discussion sections for their FYLC participants.

College of Humanities, Arts, and Social Sciences

College of Humanities, Arts, and Social Sciences (CHASS) FYLC offers three types of learning community options. The *First Year Learning Community* program is offered in the fall quarter. Participants enrolled in a large lecture course (History 20, Pre-Business 10, or Religious Studies 12), a freshmen only discussion section, and an English Writing or Composition course (English 4, 5, 1A). The *Gateway Lectures* are also offered in the fall and enroll in a lecture course about the CHASS annual theme. Classmates in the lecture's small discussion groups continue as classmates in the same Composition sections. *CHASS Connect* is a year-long learning community program that is organized around interdisciplinary courses.

College of Natural and Agricultural Sciences

College of Natural and Agricultural Sciences (CNAS) Freshman Scholars are clustered into tracks according academic majors, such as Physical Sciences and Life Sciences. Students enroll in a math and science course such as Chemistry 1A and Calculus Math 9A or a preparatory Chemistry 1W and Math 5 or 8A pre-calculus course.

Bourns College of Engineering

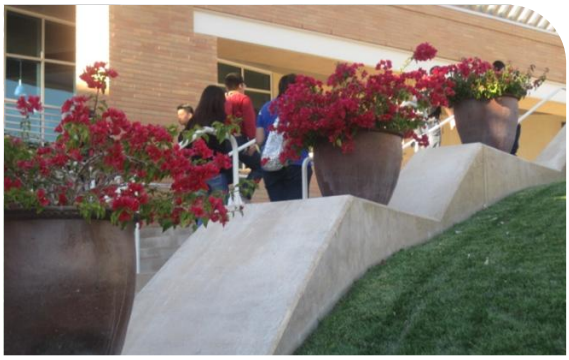
Bourns College of Engineering (BCOE) Leaning Community program clusters freshman students in primary and discussion sections together. These clusters are created based on the students' major and students are enrolled in the same course sections together (as permitted) within their major course requirement. Students enroll in courses such as Math (5, 8A-B, 9A-C), Chemistry 1A, Computer Science 10, Bioengineering 10, Chemical, Electrical, Mechanical Engineering, or a General Engineering course. English Writing or Composition courses were no longer required as they were in fall 2006.

[1] To learn more about UCR's First Year Learning Community programs please visit http://firstyear.ucr.edu/learning.html.

Results

Table 1 lists the variables used in the fall 2007 FYLC analysis. Table 2 provides the basic descriptive statistics for both FYLC participants and non-participants (Non-FYLC). These two populations are very similar. There was little difference across race/ethnic groups; however the proportion of women was slightly lower among FYLC participants compared to non-FYLC participants. Additionally, FYLC participants were more likely to live on campus. Overall, FYLC participants' retention rate was higher than non-participants (87% versus 83%), which are comparable to findings in the 2006 evaluation (85% versus 82%).

Fall 2007 FYLC average participation rate increased by nearly six percentage points (39% compared to 33% in fall 2006)[2]. This may be a reflection of enhanced campus-wide coordination in course scheduling and registration of FYLC participants, as well as increased awareness on the part of students, faculty, and administrators of the benefits of FYLCs.



[2] The average participation rates were derived from a subset of the total entering freshmen population used in the regression analyses.

Discussion

The fall 2007 program evaluation results reveal that participating in a FYLC continue to statistically significantly affect retention, where **participation in a learning community noticeably boosts a student's probability of being retained to the second year by four percentage points** (Table 3, column 3). Taking into account that only 39% of freshmen participated in an FYLC, this translates to a one and a half percentage point increase to the campus-wide retention rate. These findings are comparable to the 2006 evaluation.

Although the overall average impact of participating in a FYLC on retention was statistically significant, the impacts by college the effects vary (see Table 4). CHASS FYLCs increased the retention probability for freshmen by three percentage points, a decrease from the 2006 impact[3]. Conversely, whereas the fall 2006 findings for participants in the CNAS FYLCs was not statistically significant, in fall 2007 participants exhibited a positive and significant increase in their likelihood of being retained by six percentage points. This extraordinary improvement may be a direct result of the college's work to both increase the number of FYLC tracks and to add an academic advising component to their Freshman Scholars Seminar and

[3] CHASS LCs average impact on retention in fall 2006 was six percentage points and was strongly statistically significant at the two-tailed 0.05 level, whereas fall 2007 results are statistically significant at the 0.20 level.

strengthen supplemental instruction support[4] for the math and chemistry courses. FYLCs in BCOE did not statistically significantly affect student retention in either 2006 or 2007.

To conclude, first-year learning communities continue to grow in capacity and participation. Involvement in learning communities positively influences a participant's probability of being retained into their second year. This is true both on average and for two of the three colleges on campus.

[4] Evaluation of the Supplemental Instruction Program shows participation in this program statistically significantly increases the impact of a participant's average course grade by nearly one-third of a grade point. To read more about these results please refer to http://irue.ucr.edu/reports.html.

Table 1: Variable Definitions

First-Year Learning Community (FYLC)	1 if participated; 0 otherwise
Retention	1 if retained the subsequent fall term (1-year); 0 otherwise
Gender	1 if female; 0 if male
African American	1 if African American; 0 else
Native American	1 if Native American; 0 else
Hispanic	1 if Hispanic; 0 else
Asian/P.I.	1 if Asian/P.I.; 0 else
Caucasian	1 if Caucasian; 0 else
Other	1 if Other; 0 else
CHASS	1 if CHASS; 0 otherwise
CNAS	1 if CNAS; 0 otherwise
BCOE	1 if BCOE; 0 otherwise
First-Generation Status	1 if either Parent Education LE no 4-yr degree received; 0 GE 4-yr degree or higher
Low-Income Status	1 if Parental Income LE 30K; 0 otherwise
High School GPA	GPA score
SAT Verbal	SAT Verbal score
SAT Math	SAT Math score
On Campus	1 if living in residence halls or university owned apartments; 0 otherwise
Needmet	1 if student's financial need was met; 0 otherwise

Table 2: Descriptive Statistics, Mean (Std. Dev.)

	FYLC Mean (Std. Dev.)	Non - FYLC Mean (Std. Dev.)
Retention	0.87 (0.34)	0.83 (0.38)
Gender	0.49 (0.50)	0.54 (0.50)
African American	0.08 (0.27)	0.08 (0.28)
Native American	0.00 (0.05)	0.01 (0.08)
Hispanic	0.29 (0.46)	0.27 (0.44)
Asian/P.I.	0.46 (0.50)	0.48 (0.50)
Caucasian	0.16 (0.36)	0.15 (0.35)
Other	0.01 (0.10)	0.02 (0.14)
CHASS	0.43 (0.50)	0.61 (0.49)
CNAS	0.33 (0.47)	0.37 (0.48)
BCOE	0.24 (0.43)	0.02 (0.14)
First-Generation Status	0.51 (0.50)	0.50 (0.50)
Low-Income Status	0.40 (0.49)	0.41 (0.49)
High School GPA	3.42 (0.36)	3.40 (0.36)
SAT Verbal	503 (82)	504 (86)
SAT Math	542 (96)	542 (94)
On Campus	0.73 (0.44)	0.67 (0.47)
Needmet	0.72 (0.45)	0.71 (0.46)

Table 3: First Year Learning Community Retention Regression

	^	^	^
	B (Std. Error)	B (Std. Error)	B (Std. Error)
FYLC Impact	0.04* (0.01)	0.04* (0.01)	0.04* (0.01)
Gender		0.03* (0.01)	0.02** (0.01)
African American		0.06 (0.05)	0.07*** (0.05)
Native American		-0.03 (0.10)	-0.03 (0.10)
Hispanic		-0.02 (0.05)	0.01 (0.05)
Asian/P.I.		0.07*** (0.05)	0.06** (0.05)
Caucasian		0.03 (0.05)	0.02 (0.05)
CHASS			0.03*** (0.02)
CNAS			0.03*** (0.02)
First-Generation Status			-0.01 (0.01)
Low-Income Status			-0.02 (0.01)
High School GPA			0.12* (0.02)
SAT Verbal			0.00 (0.00)
SAT Math			0.00* (0.00)
On Campus			0.10* (0.01)
Needmet			-0.03* (0.01)
Constant	0.83* (0.01)	0.78* (0.05)	0.15** (0.09)

* Indicates statistically significant at the 0.05 level (two-tailed).

**Indicates statistically significant at the 0.10 level (two-tailed).

***Indicates statisticially significant at the 0.20 level (two-tailed).

Table 4: First-Year Learning Community Retention Regression by College

	Mean (Std. Dev.)	^ B (Std. Error)
FYLC Impact	0.39 (0.49)	0.04* (0.01)
CHASS	0.31 (0.46)	0.03*** (0.02)
CNAS	0.36 (0.48)	0.06* (0.02)
BCOE	0.88 (0.33)	0.01 (0.06)

* Indicates statistically significant at the 0.05 level (two-tailed).

**Indicates statistically significant at the 0.10 level (two-tailed).

***Indicates statisticially significant at the 0.20 level (two-tailed).