

Office of Research & Planning

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Research Briefs from the Office of Research and Planning Online Course Retention and Success of First-Time College Students

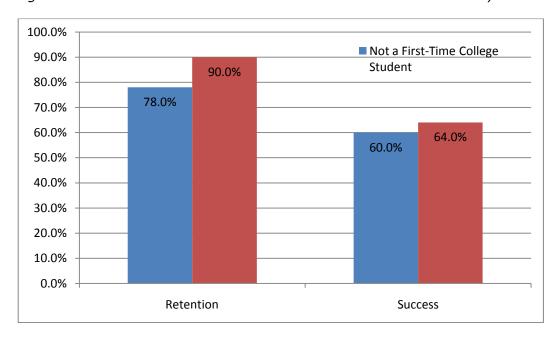
Overview: This report examines the retention and success rates of first-time college students who earned a grade on record (GOR) in an online course their first semester at Crafton Hills College. Only 50 first-time college students at Crafton earned a GOR in an online course their first semester in a five year period from Fall 2005 to Fall 2009.

Limitations: There are two limitations to the information provided in this report. First, there were only 50 first-time college students in five years (i.e. eleven semesters) that earned a GOR in an online course. Accordingly, the retention and success rate differences to students who were not first-time students may not be accurate. Second, first-time college student status was identified using National Student Clearinghouse (NSC) data. The NSC data matches students based on name and birth date, which may lead to identifying fewer first-time college students. Moreover, any student that has a FERPA (Federal Educational Rights and Privacy Act) block is excluded by the NSC, which again may lead to identifying a lower number of first-time college students.

Summary of Findings:

- 50 first-time Crafton Hills College students earned a GOR in an online course their first semester at Crafton from Fall 2005 to Fall 2009
- First-time college students who enrolled in an online course were more likely to be Caucasian (64%), 19 years old or younger (30%), and female (66%)
- First-time college students had a higher online course retention rate (90%) than students who were enrolled in the same section who were not first-time college students (78%)
- First-time college students had a higher online course success rate (64%) than students who were enrolled in the same section who were not first-time college students (60%)

Figure 1: Fall 2005 to Fall 2009 Online Retention and Success Rates by Enrollment Status.



Methodology: Data from Datatel and the National Student Clearinghouse (NSC) was combined to identify first-time college students who earned their first grade on record (GOR) at Crafton Hills College from Fall 2005 to Fall 2009. Students who earned a GOR in an online course at Crafton their first semester were compared to students in the same online section who were not first-time college students. Limitations to this comparison are described on the first page.

Grade on record (GOR) refers to one of the following grades: A, B, C, D, F, CR/P, NC/NP, I, or W. Retention rate is defined as the number of A, B, C, D, F, CR/P, NC/NP, or I grades divided by the number of GOR. Success rate is defined as the number of A, B, C, or CR/P grades divided by the number of grades on record.

The effect size statistic was used to indicate the size of the difference on retention and success. One method of interpreting effect size was developed by Jacob Cohen. Jacob Cohen defined "small," "medium," and "large" effect sizes. He explained that an effect size of .20 can be considered small, an effect size of .50 can be considered medium, and an effect size of .80 can be considered large. An effect size is considered to be meaningful if it is .20 or higher. Equally important, if the lower end of the effect size confidence interval (CI) is above .20 it indicates that there is a 95% probability that the program or characteristic has a meaningful impact on the outcome. It is important to mention that the number of students in each group does not influence Effect Size; whereas, when statistical significance is calculated, the number of students in each group does influence the significance level (i.e. "p" value being lower than .05).

Sample: First-time college students who enrolled in an online course from Fall 2005 to Fall 2009 were more likely to be Caucasian (64%), 19 years old or younger (30%), and female (66%).

Table 1: CHC First-Time College Students who Earned a GOR in an Online Course from Fall 2005 to Fall 2009 by Ethnicity, Gender, and Age.

Characteristic	#	%	Characteristic	#	%
Ethnicity			Age		
Asian	1	2.0	19 or younger	15	30.0
African American	5	10.0	20 - 24	12	24.0
Hispanic	12	24.0	25 - 29	10	20.0
Caucasian	32	64.0	30 - 34	5	10.0
Total	50	100.0	35 - 39	2	4.0
			40 - 49	6	12.0
Gender			Total	50	100.0
Female	33	66.0			
Male	16	32.0			
Unknown	1	2.0			
Total	50	100.0			

Findings: Retention. First-time college students had a higher online course retention rate (90%) than students who were enrolled in the same section who were not first-time college students (78%, see Table 2). The difference was not statistically significant (p > .05). At the same time, the effect size was higher than .20, indicating a substantial effect. However, the lower limit of the confidence interval of -.01 indicates that there are not enough cases to conclude that first-time college students are more likely to have a higher online course retention rate in their first semester than students in the same section who were not first-time college students.

Success. First-time college students had a higher online course success rate (64%) than students who were enrolled in the same section who were not first-time college students (60%, see Table 2). The difference was not statistically significant (p < .05) or substantial (ES >= .20).

Table 2: Online Course Retention and Success Rates from Fall 2005 to Fall 2009 for First-Time College Students and Students Enrolled in the Same Online Section who were not First-Time College Students.

Academic	Not a First-Time		First-Time College			Effect Size & 95% CI		P-		
Year and	College Student		Student			Lower & Upper ES		'		
Outcome	#	N	%	#	N	%	ES	Lower	Upper	Value
Retention	246	314	78.3	45	50	90.0	.29	01	.59	.056
Success	189	314	60.2	32	50	64.0	.08	22	.38	.610