



Research Brief

Fall to Spring Retention (Persistence) from 2011-2012 to 2015-2016 by College and Student Demographics

Prepared by Keith Wurtz

Purpose of Brief

This research brief examines the fall to spring retention rate, also known as persistence, from 2011-2012 to 2015-2016 by college, gender, ethnicity, age, economic disadvantaged status and full or part-time status.

Summary of Findings

Crafton Hills College (CHC)

- The CHC fall to spring retention rate has remained relatively the same ranging from 69% to 72% from 2011-2012 to 2015-2016
- Full-time students had the highest fall-to-spring retention (persistence) rate of 85%
- Disproportionately impacted groups
 - 40 years old or older
 - Part-time students

San Bernardino Valley College (SBVC)

- The SBVC fall to spring retention rate has remained relatively the same ranging from 70% to 72% from 2011-2012 to 2015-2016
- Disproportionately impacted groups
 - 35-39 years old
 - 50 years old or older
 - Part-time students
- Full-time students had the highest fall-to-spring retention (persistence) rate of 82%

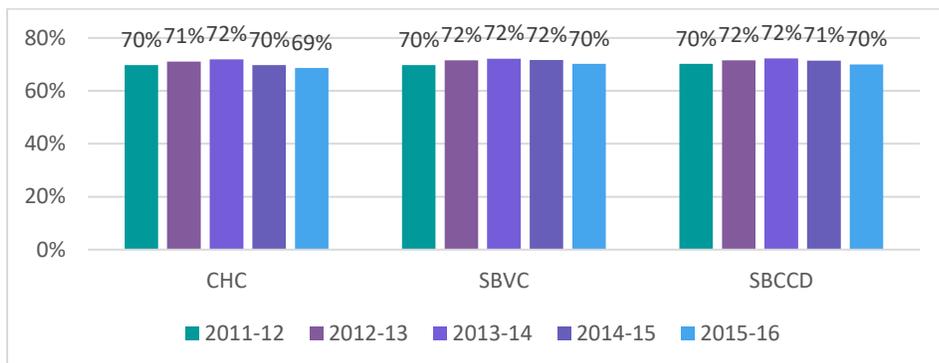
Overview

This research brief examines the fall to spring retention rate, also known as persistence, from 2011-2012 to 2015-2016 by college, gender, ethnicity, age, economic disadvantaged status, and full-time or part-time status.

Overall Findings

The fall to spring retention rate (i.e. persistence) has remained relatively the same over the last five academic years from 2011-2012 to 2015-2016 ranging from 68.7% to 72.3% (see Figure 1 and Table 1). In the most recent academic year, 2015-2016, Crafton had a 69% fall to spring retention rate, San Bernardino Valley had a 70% retention rate, and the District had a 70% retention rate.

Figure 1: Percent of Students Retained (Persisted) from 2011-2012 to 2015-2016 by College.



Possible Implications

When examining disproportionate impact (DI) for fall to spring retention in 2015-2016, DI was present at both Crafton and San Bernardino Valley by age and number of units enrolled. Crafton students who were 40 years old or older, or part-time were less likely to earn a grade on record (GOR) in the subsequent spring semester. Similarly, San Bernardino Valley students who were 35-39 or 50 years old or older, or part-time students were also less likely to earn a GOR in the subsequent spring semester. The difference in fall to spring retention rate was largest among part-time students, suggesting that strategies to increase retention need to focus on part-time students. Equally important, the lowest retention rates existed for Crafton and San Bernardino Valley part-time students who were 25-29 years old and 35 years old or older (Note: Data not shown here.). Native American students and students who did not receive financial aid also had lower fall-to-spring retention rates for both colleges. Strategies for these groups could be developed as well to help increase the college retention rates.

Table 1: Number and Percent of Students Retained (Persisted) from 2011-2012 to 2015-2016 by College.

College	Year	Retained	GOR	% Retained
CHC	Fall 2011 to Spring 2012	3,564	5,110	69.7
	Fall 2012 to Spring 2013	3,412	4,800	71.1
	Fall 2013 to Spring 2014	3,684	5,126	71.9
	Fall 2014 to Spring 2015	3,721	5,337	69.7
	Fall 2015 to Spring 2016	3,816	5,556	68.7
SBVC	Fall 2011 to Spring 2012	8,043	11,528	69.8
	Fall 2012 to Spring 2013	8,058	11,271	71.5
	Fall 2013 to Spring 2014	8,323	11,525	72.2
	Fall 2014 to Spring 2015	8,805	12,282	71.7
	Fall 2015 to Spring 2016	8,634	12,293	70.2
District*	Fall 2011 to Spring 2012	11,435	16,297	70.2
	Fall 2012 to Spring 2013	11,313	15,803	71.6
	Fall 2013 to Spring 2014	11,863	16,403	72.3
	Fall 2014 to Spring 2015	12,390	17,349	71.4
	Fall 2015 to Spring 2016	12,314	17,584	70.0

*Students are unduplicated across District so that students who attended both colleges are not counted twice.

Findings

Tables 2A – 2E examine the fall to spring retention rate for disproportionate impact by ethnicity, gender, age, economically disadvantaged status, and full or part-time status (see Methodology Section at end of brief for definition of disproportionate impact). Crafton students who were 40 years old or older, or part-time were less likely to earn a grade on record (GOR) in the subsequent spring semester. The difference in fall to spring retention rate was largest among part-time Crafton students.

Table 2A: Number and Percent of Crafton Students Retained (Persisted) from 2011-2012 to 2015-2016 by Ethnicity.

Ethnicity		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
Asian	#	86	165	251
	%	34.3%	65.7%	100.0%
African American	#	108	239	347
	%	31.1%	68.9%	100.0%
Hispanic	#	753	1,774	2,527
	%	29.8%	70.2%	100.0%
Native American	#	21	31	52
	%	40.4%	59.6%	100.0%
Caucasian	#	769	1,596	2,365
	%	32.5%	67.5%	100.0%
Missing	#	3	11	14
	%	21.4%	78.6%	100.0%
Total	#	1,740	3,816	5,556
	%	31.3%	68.7%	100.0%

Reference Group
70.2% * 80% = 56.2%

Table 2B: Number and Percent of Crafton Students Retained (Persisted) from 2011-2012 to 2015-2016 by Gender.

Gender		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
Unknown	#	17	7	24
	%	70.8%	29.2%	100.0%
Female	#	899	2,028	2,927
	%	30.7%	69.3%	100.0%
Male	#	824	1,781	2,605
	%	31.6%	68.4%	100.0%
Total	#	1,740	3,816	5,556
	%	31.3%	68.7%	100.0%

Reference Group
69.3% * 80% = 55.4%

Table 2C: Number and Percent of Crafton Students Retained (Persisted) from 2011-2012 to 2015-2016 by Age.

Age		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
19 or younger	#	481	1,434	1,915
	%	25.1%	74.9%	100.0%
20-24	#	634	1,478	2,112
	%	30.0%	70.0%	100.0%
25-29	#	282	429	711
	%	39.7%	60.3%	100.0%
30-34	#	114	211	325
	%	35.1%	64.9%	100.0%
35-39	#	69	111	180
	%	38.3%	61.7%	100.0%
40-49	#	89	100	189
	%	47.1%	52.9%	100.0%
50 and above	#	71	53	124
	%	57.3%	42.7%	100.0%
Total	#	1,740	3,816	5,556
	%	31.3%	68.7%	100.0%

Reference Group
74.9% * 80% = 59.9%

52.9% and 42.7% are less than 59.9% indicating that students 40 years old or older are less likely to persist to the subsequent spring semester.

Table 2D: Number and Percent of Crafton Students Retained (Persisted) from 2011-2012 to 2015-2016 by Financial Aid Status.

Received Financial Aid		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
No	#	843	1,349	2,192
	%	38.5%	61.5%	100.0%
Yes	#	897	2,467	3,364
	%	26.7%	73.3%	100.0%
Total	#	1,740	3,816	5,556
	%	31.3%	68.7%	100.0%

Reference Group
74.9% * 80% = 59.9%

Table 2E: Number and Percent of Crafton Students Retained (Persisted) from 2011-2012 to 2015-2016 by Full-Time and Part-Time Status.

Units Enrolled		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
Part-Time (<12 units)	#	1,457	2,242	3,699
	%	39.4%	60.6%	100.0%
Full-Time (>=12 units)	#	283	1,574	1,857
	%	15.2%	84.8%	100.0%
Total	#	1,740	3,816	5,556
	%	31.3%	68.7%	100.0%

60.6% is less than 67.8% indicating that part-time students are less likely to persist to the subsequent spring semester.

Reference Group
84.8% * 80% = 67.8%

Tables 3A – 3E examine the fall to spring retention rate for disproportionate impact by ethnicity, gender, age, economically disadvantaged status, and full or part-time status (see Methodology Section at end of brief for definition of disproportionate impact). Similar to Crafton students, San Bernardino Valley students who were 35-39 or 50 years old or older, or part-time students were also less likely to earn a GOR in the subsequent spring semester. The difference in fall to spring retention rate was largest among part-time San Bernardino Valley students.

Table 3A: Number and Percent of San Bernardino Valley Students Retained (Persisted) from 2011-2012 to 2015-2016 by Ethnicity.

Ethnicity		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
Asian	#	136	337	473
	%	28.8%	71.2%	100.0%
African American	#	574	1,124	1,698
	%	33.8%	66.2%	100.0%
Hispanic	#	2,207	5,804	8,011
	%	27.5%	72.5%	100.0%
Native American	#	39	61	100
	%	39.0%	61.0%	100.0%
Caucasian	#	687	1,283	1,970
	%	34.9%	65.1%	100.0%
Missing	#	16	25	41
	%	39.0%	61.0%	100.0%
Total	#	3,659	8,634	12,293
	%	29.8%	70.2%	100.0%

Reference Group
72.5% * 80% = 58%

Table 3B: Number and Percent of San Bernardino Valley Students Retained (Persisted) from 2011-2012 to 2015-2016 by Gender.

Gender		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
Unknown	#	9	9	18
	%	50.0%	50.0%	100.0%
Female	#	2,019	5,037	7,056
	%	28.6%	71.4%	100.0%
Male	#	1,631	3,588	5,219
	%	31.3%	68.7%	100.0%
Total	#	3,659	8,634	12,293
	%	29.8%	70.2%	100.0%

Reference Group
71.4% * 80% = 57.1%

Table 3C: Number and Percent of San Bernardino Valley Students Retained (Persisted) from 2011-2012 to 2015-2016 by Age.

Age		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
19 or younger	#	620	2,417	3,037
	%	20.4%	79.6%	100.0%
20-24	#	1,324	3,040	4,364
	%	30.3%	69.7%	100.0%
25-29	#	707	1,283	1,990
	%	35.5%	64.5%	100.0%
30-34	#	333	666	999
	%	33.3%	66.7%	100.0%
35-39	#	232	378	610
	%	38.0%	62.0%	100.0%
40-49	#	238	510	748
	%	31.8%	68.2%	100.0%
50 and above	#	205	340	545
	%	37.6%	62.4%	100.0%
Total	#	3,659	8,634	12,293
	%	29.8%	70.2%	100.0%

Reference Group
79.6% * 80% = 63.7%

62% and 62.4% are less than 63.7% indicating that students 35-39 and 50 years old or older are less likely to persist to the subsequent spring semester.

Table 3D: Number and Percent of San Bernardino Valley Students Retained (Persisted) from 2011-2012 to 2015-2016 by Financial Aid Status.

Received Financial Aid		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
No	#	1,034	1,520	2,554
	%	40.5%	59.5%	100.0%
Yes	#	2,625	7,114	9,739
	%	27.0%	73.0%	100.0%
Total	#	3,659	8,634	12,293
	%	29.8%	70.2%	100.0%

Reference Group
73% * 80% = 58.4%

Table 3E: Number and Percent of San Bernardino Valley Students Retained (Persisted) from 2011-2012 to 2015-2016 by Full-Time and Part-Time Status.

Units Enrolled		Did not earn GOR in Spring Term	Earned GOR in subsequent Spring Term	Total
Part-Time (<12 units)	#	2,879	5,113	7,992
	%	36.0%	64.0%	100.0%
Full-Time (>=12 units)	#	780	3,521	4,301
	%	18.1%	81.9%	100.0%
Total	#	3,659	8,634	12,293
	%	29.8%	70.2%	100.0%

64% is less than 65.5% indicating that part-time students are less likely to persist to the subsequent spring semester.

Reference Group
81.9% * 80% = 65.5%

Methodology

Retained (i.e. persisting) students earned a grade on record (GOR) in the fall semester and in the subsequent spring semester. GOR is defined as earning a grade of A, B, C, D, F, I, NP, P, or W and demonstrates that a student was enrolled past the census date of the section. Equally important, if students earned a degree, certificate, or transferred in the same academic year they were excluded from the fall cohort. As an illustration, if a student earned a GOR in Fall 2015 and earned a degree in Spring 2016, they were excluded from the cohort. Five years of fall-to-spring retention data is included in this brief from 2011-2012 to 2015-2016. Full-time students are students who were enrolled in 12 or more units and part-time students were enrolled in less than 12 units.

The 80% rule was used to identify disproportionate impact. The methodology is based on the Equal Employment Opportunity Commission (EEOC) 80% Rule and was used in Title VII enforcement by the US Equal Opportunity Commission, Department of Labor, and the Department of Justice (Michalowski, 2014). The 80% Rule states that:

A selection rate for any race, sex, or ethnic group which is less than four-fifths (4/5) (or eighty percent) of the rate for the group with the highest rate will generally be regarded by the Federal enforcement agencies as evidence of adverse impact, while a greater than four-fifths rate will generally not be regarded by Federal enforcement agencies as evidence of adverse impact. [Section 60-3, Uniform Guidelines on Employee Selection Procedure (1978); 43 FR 38295 (August 25, 1978)]

The 80% index is calculated by dividing the outcome rate (e.g.: fall to spring retention rate) of a non-reference subgroup into the outcome rate of the reference subgroup (Michalowski, 2014). A result of less than 80% is considered evidence of disproportionate impact. However, if the subgroup did not have the amount of cases needed for a statistically significant finding (N = 30), then the highest outcome rate with the amount of cases needed for a significant finding was selected as the reference group.

For more information, please contact Keith Wurtz, Dean, CHC Office of Institutional Effectiveness, Research, and Planning at kwurtz@craftonhills.edu or via phone at 909-389-3206; 20170323_All_Grades_GOR_FiveYears_1112to1516.sav; PersistenceALL_1112to1516_Undup.sav; and PersistenceByCollege_1112to1516.docx.