Memo on One Year Retention with data from 2010-2013

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This memo is meant to provide additional context for one-year retention rates at the University of California, Riverside. It compares students who returned for a second fall to those who did not. Data from four cohorts of students who entered UCR as freshmen in the fall of 2010, 2011, 2012 and 2013 are used here. Of the 16,294 students who entered UCR in these four years, 1,894 did not return for a second fall and the average one year retention rate is 88.4% across these four cohorts. (There is an uneven increase of about 1% from the cohort of 2010 to 2013.)

Table one presents descriptive statistics for those who returned for their second fall (at right) and those who did not (at left). All differences are statistically significant with the exception of gender. Among those who did not return, there are more first generation students, more Hispanic students and fewer Asian students. Almost a third of those who did not return for a second fall placed into remedial math (ARC 035); while about a third also brought in AP credit for math or otherwise placed at the college level, this is more than 10% lower than the comparable figure for those who did return for a second fall. About 42% of those who were not retained placed into college level English compared to about 52% of those who did return for the second year. There are slightly more student from CHASS and fewer from CNAS who do not return for a second year. The distribution of majors, in table two, is generally similar for the two groups. While it is not surprising that high school GPAs and standardized test scores are lower among those not retained, those who did not return for their second year had GPAs in fall of their first year at UCR that were markedly lower than those who did (at 2.09 compared to 2.84). Figure one drives this point home. (Note there were 207 students who earned a first quarter GPA of 0.00 and they have been dropped from analyses here on the assumption they may have never actually "showed up.")

Overall, this suggests it may be possible to identify those who are at risk for not returning for their second year at UCR based on low GPA in their first quarter. However, GPA is a broad measure and it is more difficult to parse out what, exactly, a low GPA signals.

Table One: Demographics of freshman in 2010-2013 who returned for their second fall and those who did not

	Left UCR before second fall	Returned for second fall
Female	52.13%	53.21%
Male	47.87%	46.79%
Hispanic	40.70%	35.91%
Asian	34.60%	43.09%
Caucasian	12.84%	12.42%
Black	6.97%	6.24%
Other and Native American	4.59%	2.34%
First Gen	60.42%	55.20%
Not First Gen	39.58%	44.80%
HSGPA	3.44	3.54
SAT Verb	502	523
SAT Math	539	561
SAT Writ	510	530
Placed into Coll. level Engl.	42.66%	51.90%
ARC 035	31.64%	20.92%
Math 004	12.40%	11.59%
Math 005	14.18%	16.70%
Math 008A	9.86%	7.59%
Other placement	30.92%	43.20%
CHASS	53.77%	51.04%
BCOE	16.81%	15.64%
CNAS	29.42%	33.32%
Cum GPA first fall	2.09	2.86

Table Two: Most common majors for freshman in 2010-2013 who did not return for their second fall, with percent in same major for those who did

	Left UCR before second Fall	Returned for second fall
Pre-business	12.03%	13.14%
Undeclared, CHASS	11.28%	9.46%
Biology	7.77%	10.08%
Biochemistry	5.07%	6.70%
Undeclared, Life sciences	4.20%	3.14%
Mechanical Engineering	4.03%	3.51%
Psychology	3.80%	4.54%
Biological Sciences	3.80%	4.36%
Sociology	2.99%	2.77%
Bioengineering	2.88%	2.47%

Figure One: Distribution of grades for those who left UCR before their second fall and those who returned for a second fall, freshmen in fall 2009-2013

Graphs by one_year_retention