

What are UCSC's retention and graduation rates?

Compiled by Julian Fernald, UC Santa Cruz

Detailed retention and graduation tables for freshmen entrants are posted at:
[http://planning.ucsc.edu/irps/Enrollmt/retain/2011_12/Frosh\(2011-12Tables\).pdf](http://planning.ucsc.edu/irps/Enrollmt/retain/2011_12/Frosh(2011-12Tables).pdf)
and for transfers at:
[http://planning.ucsc.edu/irps/Enrollmt/retain/2011_12/Transfer\(2011-12Tables\).pdf](http://planning.ucsc.edu/irps/Enrollmt/retain/2011_12/Transfer(2011-12Tables).pdf)

- UC Santa Cruz's six-year freshmen graduation rate has been gradually and steadily improving over the past decade, reaching a campus high of 73.6 percent for the 2004 cohort, with a slight decline to 73 percent for the 2005 cohort.
- Prior to the 2010 entering class, the one-year retention rate had been relatively stable at 89%, with less than one-half a percentage point variation among entering freshmen cohorts since 2003. (The exception was the 2007 cohort, with a rate of 88%).
- The most recent one-year retention rate for the 2010 cohort is up by two percentage points, from 89% to 91% (with rounding). Preliminary data for the 2011 entering freshmen suggests we will hit 91% again.
- Historically, a specific cohort's six-year graduation rate closely corresponds with its one-year retention rate.
- Given the observed relationship between one-year retention rates and six-year graduation rates an increase in the six-year graduation rate is unlikely without specific interventions or changes in campus practices until the 2010 cohort has had six years in which to graduate, by the end of (summer) 2015-16. However,
- Even the increases in six year graduation rates associated with the recent improvements in one-year retention will be more modest than the articulated campus goals without some additional improvement in the current trends.
- (A proposed set of campus goals is posted at <http://planning.ucsc.edu/irps/retention/Docs/GoalsRationale.pdf>, although these have not been formally approved.)
- At between 81 percent and 83 percent in recent years, the four-year graduation rate for transfer students already exceeds the current six-year rate for freshmen and the proposed six-year freshmen target.
- The two-year transfer graduation rate (equivalent to the freshmen four-year rate) is much lower at 47%.
- There have been no specific goals for transfer students articulated to this point, there is very little comparative data on transfer students, and almost no analysis of those rates. (Most of what we know is based on entering freshmen.)

How do UCSC's retention and graduation rates compare?

- Of the eight UC undergraduate campuses excluding Merced, only Riverside has a six-year graduation rate lower than Santa Cruz's.

- For any given cohort, UCSC's overall 6-year graduation rates are below the average of the rates for UC campuses;
- While there is some year-to-year variability, there has been a general trend of gradual improvement in the 6-year graduation rates over the past 15 years both at UCSC and in the UC campus average. However,
- The rate of improvement in the 4-year graduation rate has been steeper for the UC average than for UCSC, indicating that Santa Cruz has not achieved the same improved time-to-degree as have other campuses.
- Another way to state this last observation is to note that spread between 4- and 6-year UC rates has narrowed over time, while that spread has remained relatively constant at Santa Cruz.
- Our freshmen retention and graduation rates are also below the mean for all institutions classified by Carnegie as very high research, a group to which we belong, and all AAUs without medical schools, an aspirational peer group.
- At least some of these disparities can be explained by differences in institutional selectivity and in academic preparation and demographic composition of the student body.
- Using a statistical model based on national data to take those differences into account, UC Cruz's actual six-year graduation rates exceed regression based predicted graduation rates based on demographics and preparation levels of the students we enroll. In other words, our graduation rates are somewhat better than the rates of other four year institutions that enroll similar students to ours.

What is the variability in retention and graduation rates among demographic and other groups of UCSC students?

- At UCSC retention rates in the first two years are remarkably similar across subpopulations.
- Overall retention rates of underrepresented students of color in the first two years are similar to the campus average, and gender gaps in early retention rates are fairly small.
- Similarly, neither of the two measures of academic preparation, HSGPA and SAT, obviously distinguish UC Santa Cruz students in terms of one- and two-year retention rates.
- Retention rates across student sub-populations diverge after the third year through eventual graduation.
- Underrepresented students of color, and to a lesser extent men, are retained at the upper division and graduate at lower rates than White and Asian students, and women respectively.
- Students who enter UC Santa Cruz in the lower quintiles of HSGPA and SAT scores also graduate at lower rates than students from the upper quintiles.
- Graduation rate gaps by race/ethnicity and by gender at UCSC have been narrowing, and the race/ethnicity gaps tend to be smaller at UC Santa Cruz than at most other UC campuses.

- Underrepresented students of color also graduate at higher than predicted rates at UC Santa Cruz. In recent years, African American and Latino/a students have on average exceeded expected graduation rates by ten percent or more, indicating much smaller race/ethnicity gaps at UC Santa Cruz than is the national norm.
- Similarly, students who were in the bottom two quintiles of UCSC entry cohorts on High School GPA and SAT scores graduated by as much as ten percent above predicted rates.
- Students in the top quintiles of those two academic preparation indicators, despite graduating at higher absolute rates, graduated at about four percent below predicted rates, which means UCSC graduates a smaller percentage of its most highly prepared students than is the national norm.

When do students leave UCSC?

- In recent years UC Santa Cruz has lost nearly 11 percent of entering freshmen before the start of the second year. For the most recent two cohorts that percent has gone down slightly to 9 to 10 percent.
- UC Santa Cruz's average first year attrition is higher than it is at particular selective comparison institutions, including most other UC campuses, but only by one to two percentage points.
- Many institutions experience their biggest attrition between the first and second year. This is not surprising given that a certain amount of attrition is related to adjustment to college, fit with, commitment to, and investment in a particular institution, and academic preparation for college level.
- UC Santa Cruz's second to third year attrition tends to be nearly as large as the first to second year. In recent years it has represented an additional 8 to 10 percent of the initial cohort.
- UCSC loses an additional six or seven percent after the third year, the point at which both students and the institution have made a considerable investment.

Why do students leave UCSC?

- There are many possible reasons that students leave UC Santa Cruz (or any other institution) without earning a degree, either as a drop-out, stop-out, or to transfer, and those reasons are probably different at different points in students careers.
- Periodically the individual UC Santa Cruz colleges have conducted exit surveys of students who withdraw in order to ascertain their reasons for leaving. These efforts, however, have been inconsistent across colleges and years, and tend to miss students who are either leaving later in their

academic career or who simply fail to return after the summer as opposed to withdrawing mid-year.

- Results that have been analyzed suggest a variety of reasons, ranging from personal to financial to academic to fit.
- Analysis of student records from Kresge and Porter suggest a predominance of mental health and substance abuse issues.
- A more systematic collection of data about why students leave is currently being planned

What are the factors associated with attrition?

- Across students' careers, low academic performance is consistently one of the best predictors of attrition.
- Students whose cumulative GPA is below 2.5 are more likely to leave UC Santa Cruz across their academic careers.
- Poor academic performance could be related to a number of factors, from inadequate preparation, to financial problems, to not finding a good fitting and appropriate major, to personal, family, mental health or substance abuse issues.
- Lower overall satisfaction and sense of belonging is a consistent and important contributor to students leaving after the first or second year.
- After year three, retention is not associated with overall satisfaction and sense of belonging, unlike earlier retention points. Persisting at UC Santa Cruz after the third year appears to be less related to students' fit with the campus, and more related to other factors.
- Early retention rates are fairly equal across race/ethnicity categories, and Under represented students in some cases are more likely to be retained than other students. When other factors that influence retention are taken into account, and when there are significant average differences between students based on race/ethnicity, students of color are usually more likely to be retained than White students. That includes being less deterred by earning a lower GPA and being even more likely than White students to benefit from perceiving academic gains.
- In terms of ultimate graduation rates, there are gaps by race/ethnicity. They are smaller than on many other campuses, and they are better than statistical modeling would lead us to expect. Nevertheless they are persistent.
- First generation college students are more likely to be retained at the lower division than non-first generation college students when you take into account their academic performance, or even their levels of satisfaction.
- However, being a first generation college student also places students at risk for not "making it across the finish line."

- In recent years there has been considerable concern on campus that a disproportionate number of the “best students”—those who were high achievers in high school (as indicated by high school GPA and/or SAT scores) or at UC Santa Cruz (as indicated by cumulative GPA at UC Santa Cruz)—leave UC Santa Cruz without graduating. Although there is a very small increased likelihood of students with the highest GPAs leaving UC Santa Cruz after the first year, it is small both in terms of percentages and overall numbers, and the difference is not statistically significant when other factors are taken into account.
- That pattern does not consistently persist past the second year. In fact by the fourth year having a higher GPA is associated with a considerably greater likelihood of graduating.
- At the upper division perceiving higher levels of gains across a broad variety of domains (including critical thinking, cultural appreciation, communication, computer and research skills), as well as experiencing the curriculum as more analytically challenging is associated with greater persistence. This relationship is more pronounced among some students of color.
- Students with the highest SAT scores were less likely to perceive that they had made large gains or that the curriculum was analytically challenging.
- Although they represent a small proportion of entry cohorts, there is a small number of students who persist at UCSC until their fourth year and still fail to graduate within six years. These are students who are unable to overcome a final barrier or obstacle.
- The lower the students' GPA, the less likely they are to “cross the finish line.”
- It is also the case that after taking into account the impact of UC Santa Cruz GPA, being a first generation college student or having an SAT score in the highest quintile poses a statistical risk to clearing the final hurdle.

What are the implications of what we know about attrition?

- Any retention initiatives undertaken on campus should have as one of its main objectives to reduce the number of students who are in academic difficulty and to increase overall performance of students near the bottom.
- An important strategy could be early identification and triage of students in academic difficulty very early in their careers. Developing a consistent methodology for determining which students are doing poorly academically, indicated by either inadequate units or poor grades during their first year, could at least provide an opportunity for intervention before academic failure accumulates.
- Developing a mechanism for early identification of students who are dissatisfied or feel they don't fit (as opposed to those who are in academic

difficulty) may be possible, but would likely be difficult. It is of course the case that there will always be some students who are not a good fit with the institution.

- The lack of gaps in early retention suggests that climate is not interfering with retention. (Certainly students of color may experience a more hostile or less supportive climate, but it is not related to attrition early in their careers.) It may also suggest that various support services are effective at UCSC.
- Because being a student of color is not in and of itself related to lower retention or graduation, the lower overall graduation rates of some underrepresented students of color suggest that other factors, probably academic performance, are contributing. This is more reason to address issues related to academic performance early on.
- The association between being first generation and being more likely to be retained in the lower division means that these are students we could and should be graduating at least campus average rates. The fact that graduation rates are lower could be related to issues of cultural capital, financial issues, or others. There may be an opportunity for specific targeted interventions with this population
- Because making greater gains on a variety of skills and taking analytically rigorous coursework is indicative of a greater likelihood to persist, creating more opportunities for students to be challenged, including honors programs or opportunities to be involved more directly with faculty members' scholarly activities may benefit our retention rates, especially among our highest achieving and most highly prepared students.

Do students who do not graduate go on to complete degrees elsewhere?

- In recent years about seven to eight percent of freshmen entry cohorts graduated within six years from a four year institution other than UC Santa Cruz.
- More than half of those graduated from another UC.
- That means 20% or more of entering cohorts do not earn 4 year degrees within six years of starting their undergraduate careers, although some certainly will earn degrees over a longer time span.