

Exploring the Association between Improvements in District Graduation Rates and A-G Completion Rates

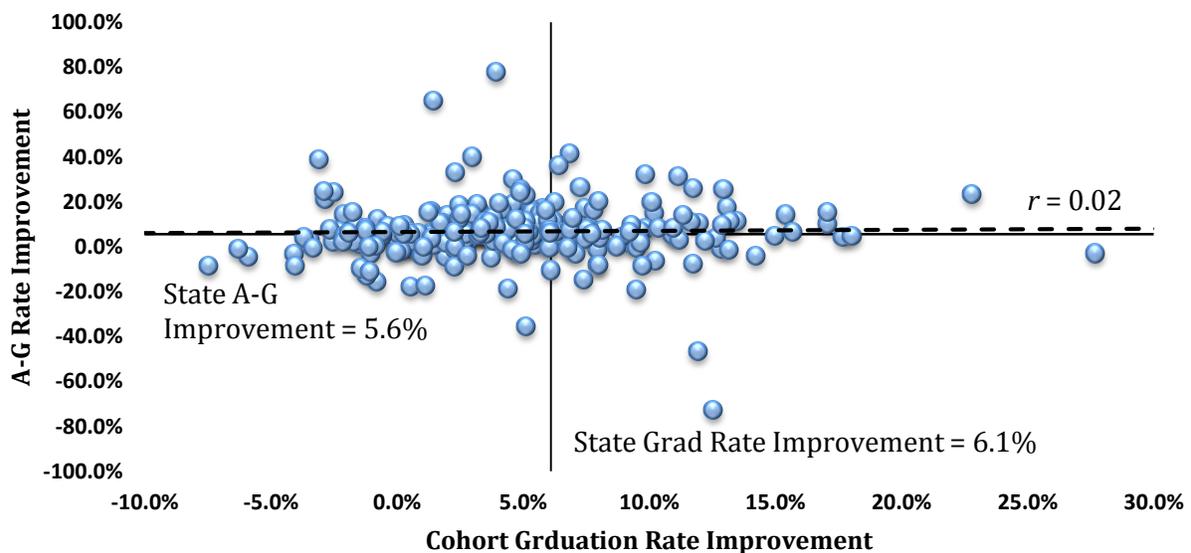
By Cameron Sublett

Much attention in recent years has focused on California’s overall high school adjusted cohort graduation rate. As the California Dropout Research Project (CDRP) previously reported¹, the state’s graduation rate has improved from 74.7% in 2009-10 to 80.8% in 2013-14, an increase of 6.1 percentage points. However, of growing concern is the number of these graduates who leave high school adequately prepared for the transition to and success in college.

Because high school coursetaking is so clearly linked to success in college, both the University of California (UC) and the California State University (CSU) systems have an established the A-G curriculum as a minimum standard for all California high school students. To meet this standard, students must pass a series of 15 specific classes with a grade of “C” or better. Along with state’s cohort graduation rate, the proportion of graduates completing the A-G curriculum has improved from 36.3% in 2009-10 to 41.9% in 2013-14, in increase of 5.6 percentage points. What remains unknown, however, is the relationship between improvement in graduation rate and improvement in A-G completion. In other words, do school districts that improve their graduation rates also improve their A-G completion rates?

Figure 1 shows the relationship between a district’s improvements in cohort graduation rates and A-G completion rates between the years of 2009-10 through 2013-14². As the correlation coefficient indicates, there is no relationship between graduation rate improvement and A-G completion.

Figure 1. District Cohort Graduation and A-G Completion Rates 2009-10 thru 2013-14³



¹ See CDRP Stat Brief #21: http://www.cdrp.ucsb.edu/pubs_statbriefs.htm

² An interactive version of this graph can be found at: https://public.tableau.com/profile/publish/SB_22_tabs/CohortXA-G-#!/publish-confirm

³ Source: California Department of Education Dataquest: <http://data1.cde.ca.gov/dataquest/>

The California school districts in the upper right quadrant of Figure 1 experienced improvements in both graduation rates and A-G completion rates between 2009-10 and 2013-14 that were greater or equal to the mean improvement rates in the state. Of the 264 school districts within the analytic sample, roughly 19 percent fall within this quadrant. In contrast, the school districts in the lower left quadrant of Figure 1 experienced improvements in both the rate of graduation and A-G completion between 2009-10 and 2013-14 that were below the overall state average improvement rate for graduation and A-G completion. Roughly, 31 percent of the school districts within the current sample fall within this quadrant.

The districts within the lower right quadrant are those with graduation rate improvements greater than the overall average, but who have below-average A-G improvement rates. This is roughly 13% of the districts within the sample. The districts within the upper left quadrant are those with graduation rate improvements below than the overall average, but who have above-average A-G improvement rates. This is roughly 37% of the districts within the sample. Overall, nearly 32% of the districts had graduation rate improvements greater than the state average. Roughly 55% of the districts had improvements in A-G completion rates that were greater than the overall state average. If we inspect the 10 districts with the greatest improvements in A-G completion rates Figure 2 illustrates that just 4 had graduation rate improvements greater than the overall state average of 6.1 percent.

Figure 2. California Districts with the Greatest Improvements in Graduation Rate

	Schools In District 2013-14	9th-12th Grade Enrollment 2013-14	Graduation Rate Improvement 2009-10 thru 2013-14	A-G Rate Improvement 2009-10 thru 2013-14
State	-	1,957,917	6.1%	5.6%
Coronado Unified	1	1,197	4.0%	77.9%
Walnut Valley Unified	3	5,784	1.5%	65.3%
Chico Unified	2	4,405	6.9%	41.8%
Jefferson Union High	7	4,761	3.0%	40.1%
Dixon Unified	1	1,239	-3.1%	38.9%
Roseville Joint Union High	8	10,219	6.4%	36.4%
Acalanes Union High	6	5,344	2.3%	33.3%
San Lorenzo Valley Unified	1	1,116	9.9%	32.3%
Kings Canyon Joint Unified	5	2,983	11.2%	31.6%
Chino Valley Unified	6	10,246	4.6%	30.3%

What stands out from the analysis of cohort graduation rate improvement and improvement in A-G completion is that the two metrics of student success appear unrelated. While graduation and A-G completion rates both improved in the aggregate between 2009-10 and 2013-14, it is not the case that improvements in, for example a district's A-G completion rate, carried over or translated into improvements in a given district's graduation rate, and vice versa. This has important policy ramifications and suggests that interventions to improve one rate cannot be assumed to improve the other. This discovery also potentially highlights that school leaders and policymakers must consider a range of interventions to boost both graduation rates and A-G completion rates.⁴

⁴ The interactive graph also displays these two indicators for each district in the state. See: https://public.tableau.com/profile/publish/SB_22_tabs/CohortXA-G#!/publish-confirm