



# CSU, CHICO BY THE NUMBERS – June 2021

A publication of the Chico State Office of Institutional Research

## Assessing Student Academic Progress Before and After Executive Order 1110

Primary Author: Peter Owens

Contributors: Laurie McConville, Diane Ramalia

In August 2017, the California State University system issued [Executive Order 1110](#) (EO 1110), which revised policies for first-year student placement in General Education (GE) courses for Written Communication and Mathematics / Quantitative Reasoning. Among the central goals of this policy was ending the placement of students into noncredit “remedial” courses in these areas, so that students could earn more units and make better progress towards degree completion, while also improving academic supports for completion of GE requirements in the first year. Now that EO 1110 has been in effect for two academic years, this month’s *By the Numbers* report will compare changes in three student outcomes: first-year GE completion rates, average units attempted and earned, and one-year retention rates for first-time freshmen cohorts who entered in Fall 2017 vs. Fall 2018 and 2019. For the sake of brevity, the report will focus solely on these outcomes with regards to Quantitative Reasoning (QR) eligibility categories; comparable data and figures on Written Communication eligibility-based outcomes are available upon request from the Office of Institutional Research.

the pre- and post-implementation eligibility groups. These differences are broadly outlined in Table 1, with the “GE Intervention” column denoting the type of intervention specified to assist students with completion of their GE requirements, whether the student had already fulfilled the requirement, or if the student was simply “ready” to enroll in a GE course with no support needed.

For the purpose of analysis, students designated as “GE Already Met” in 2017 are treated as analogous to “Category 1” students in 2018 and 2019, since both met their GE QR requirement upon matriculation. “College Ready” students in 2017 are treated as analogous to “Category 2” students in the latter years, since both groups were eligible for enrollment in GE QR courses without support. “Not College Ready” students in 2017 are treated as analogous to students in Categories 3 and 4, since all three groups were designated as needing some form of educational intervention to assist in GE completion, and together represent the main focus of EO 1110. Categories 3 and 4 can be regarded as somewhat of a disaggregation of the broader “Not College Ready” student category from 2017. In order to facilitate visual comparisons, analogous categories have been shaded using like colors across the three academic years in the figures that follow.

### Special Note: Camp Fire and the COVID-19 Pandemic

Readers should note that both the 2018-19 and 2019-20 academic years included significant disaster events that disrupted educational activity on the CSU, Chico campus – specifically the Camp Fire (November 2018) and the COVID-19 pandemic (ongoing since February – March 2020). Besides their [effects on community health and well-being](#), each event also resulted in significant changes to student academic policies that were [analyzed in a previous report from the Office of Institutional Research](#). These effects should be noted when considering the academic outcomes discussed here.

### Student Categorization Pre- and Post-Implementation

Because this report makes comparisons between outcomes for first-time freshmen who entered CSU, Chico both before (2017) and after (2018 and 2019) the implementation of EO 1110, it is important to note both the similarities and differences between

Table 1. Student Categorization by GE Intervention with Headcounts, 2017-2019 First-Time Freshmen Cohorts

Cohort Term	GE Intervention	EO 1110 Category	Headcount
Fall 2017	Not Required	GE Already Met	91
		College Ready	1,870
	1 Semester of Math Remediation	Not College Ready	437
	2 Semesters of Mth Remediation	Not College Ready	405
Fall 2018	Fulfilled GE B4 Requirements	Category 1	234
	Ready for GE B4 Course	Category 2	1,825
	Ready for GE B4 Crse w/support	Category 3	471
	Ready for GE B4 w/suport & ESP	Category 4	184
Fall 2019	Fulfilled GE B4 Requirements	Category 1	195
	Ready for GE B4 Course	Category 2	1,668
	Ready for GE B4 Crse w/support	Category 3	508
	Ready for GE B4 w/suport & ESP	Category 4	184

Figure 1 displays the composition of first-time freshmen cohorts between 2017 and 2019 within the pre- and post-EO 1110 categorization schemes. As can be seen, the “College Ready” / Category 2 groups are the largest group in each year, consistently accounted for around two-thirds of incoming freshmen cohorts, and remained relatively stable in both size and proportion. While the “GE Already Met” / Category 1 group is the smallest, it more than doubled in both size and proportion in 2018 and 2019 when compared to 2017. Conversely, while the “Not College Ready” group made up just under one-third of incoming freshmen in 2017, Categories 3 and 4 in 2018 and 2019 together comprised slightly smaller proportions of freshmen cohorts.

---

### Assessing Student Academic Outcomes

In Figures 2 through 4, the aggregate rates, means, and counts for all category groups are displayed in grey. Figure 2 displays the completion rates for GE QR requirements in the first year within EO 1110 categories between 2017 and 2019. At an aggregate level, EO 1110 appears to have significantly increased first-year GE completion rates for all category groups when compared to their 2017 analogues. However, readers can also note important disparities between Category 3 and 4 students: while Category 3 completion rates were comparable to Category 2 (and in fact slightly surpassed the latter in QR completion in 2018), completion rates for Category 4 students remained significantly lower than for the other categories. It should be noted that Category 4 is the smallest group in 2018 and 2019, and its weighted rates are therefore more sensitive to individual completion / non-completion than other groups’ rates. Nevertheless, these completion gaps are significant.

Figure 3 displays the average units attempted and earned within EO 1110 student categories. Three data points are shown on each bar, displayed vertically from top to bottom: the average number of units attempted, average units earned, and the differential between units attempted and earned. EO 1110 does appear to have contributed to an increase in attempted units for all groups in 2018 and 2019, when compared to the 2017 cohort, although these gains are more modest for some groups than others. Category 3 students appear to have once again benefited from EO 1110 more strongly than Category 4 students, with the latter group having the lowest mean number of attempted units. Readers should also note that Category 4 students made little to no gains in mean units earned when compared to the “Not College Ready” group in 2017, and have a much higher differential between mean units attempted and earned than other EO 1110 groups. While being able to attempt more units than before is certainly a benefit, this benefit is not as impactful when those units do not ultimately translate into increased progress toward degree completion.

Figure 4 displays one-year retention rates for First-Time Freshmen cohorts between 2017 and 2019 within EO 1110 categories. Although aggregate one-year retention appears to

have decreased slightly, the total rates are very close to flat across the three years shown when we account for the slight decline in overall enrollment. When we disaggregate the rates within the category groups, we can see that the relatively flat aggregate rates are balancing a slight increase in Category 1 retention against a slight decrease in retention for students requiring GE support. Category 2 student retention was fairly flat and decreased only slightly, from just above to just below 85%. Category 4 students exhibited the lowest retention rates in 2018 and 2019 (72.3% and 77.7%, respectively, compared to 82.1% for Not College Ready students in 2017). Readers should once more keep in mind that Category 4 is the smallest category group, and its rates are therefore more sensitive to individual retention losses than the other groups.

Apart from the effects of EO 1110, it is also likely that the disaster events mentioned earlier (the Camp Fire and COVID-19 pandemic) could have negatively affected retention during this period, and it is difficult to parse the independent effects of EO 1110 policy changes from those of disaster events.

As a whole, these data demonstrate that EO 1110 has almost certainly made positive impacts on short-term academic outcomes for first-time freshmen, through both increased completion rates for GE Quantitative Reasoning requirements and increases in units attempted and earned in the first year. These aggregate improvements are especially notable in light of the significant disaster events that occurred during each of these two academic years; it is difficult to estimate how effective EO 1110 policies may have been in the absence of such disruptive events. However, the data also highlight ongoing and significant inequalities in academic progress for the students most in need of academic support. Specifically, while EO 1110 appears to have brought students in Category 3 closer to parity with Category 2 students than the “Not College Ready” and “College Ready” cohort groups in 2017, in terms of both first-year GE completion and unit accumulation, Category 4 student outcomes saw only modest improvements. Furthermore, the slight declines in one-year retention rates for Category 3 and 4 students, when compared with the 2017 “Not College Ready” cohort, highlights a more general need for improvements to student support.

---

### EO 1110 and Racial Equity

The Office of Institutional Research is engaged in ongoing analyses and distribution of EO 1110 outcome data with our campus partners. A future *By the Numbers* report will show the results of these analyses with regards to EO 1110 and racial equity, which is a key strategic priority of the CSU, Chico campus and a central component of systemwide initiatives such as Graduation Initiative 2025.

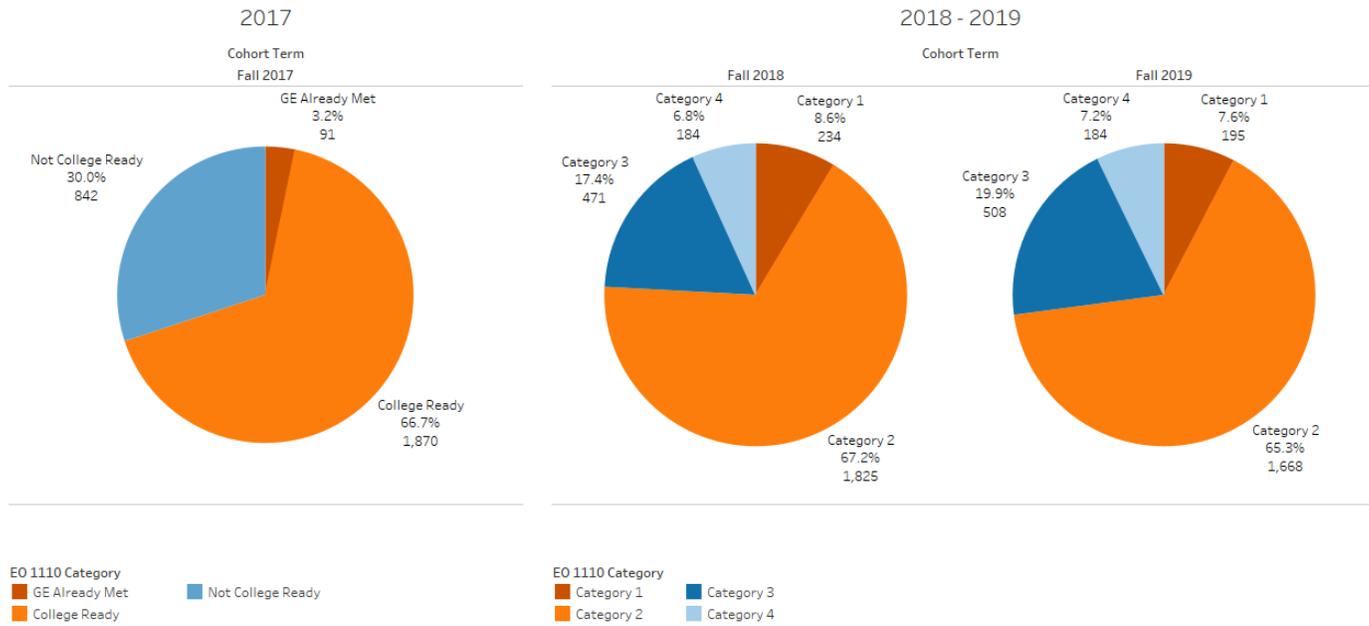


Figure 1. Students Eligible for GE QR Enrollment by EO 1110 Categories, Fall 2017 – 2019 First-Time Freshmen Cohorts

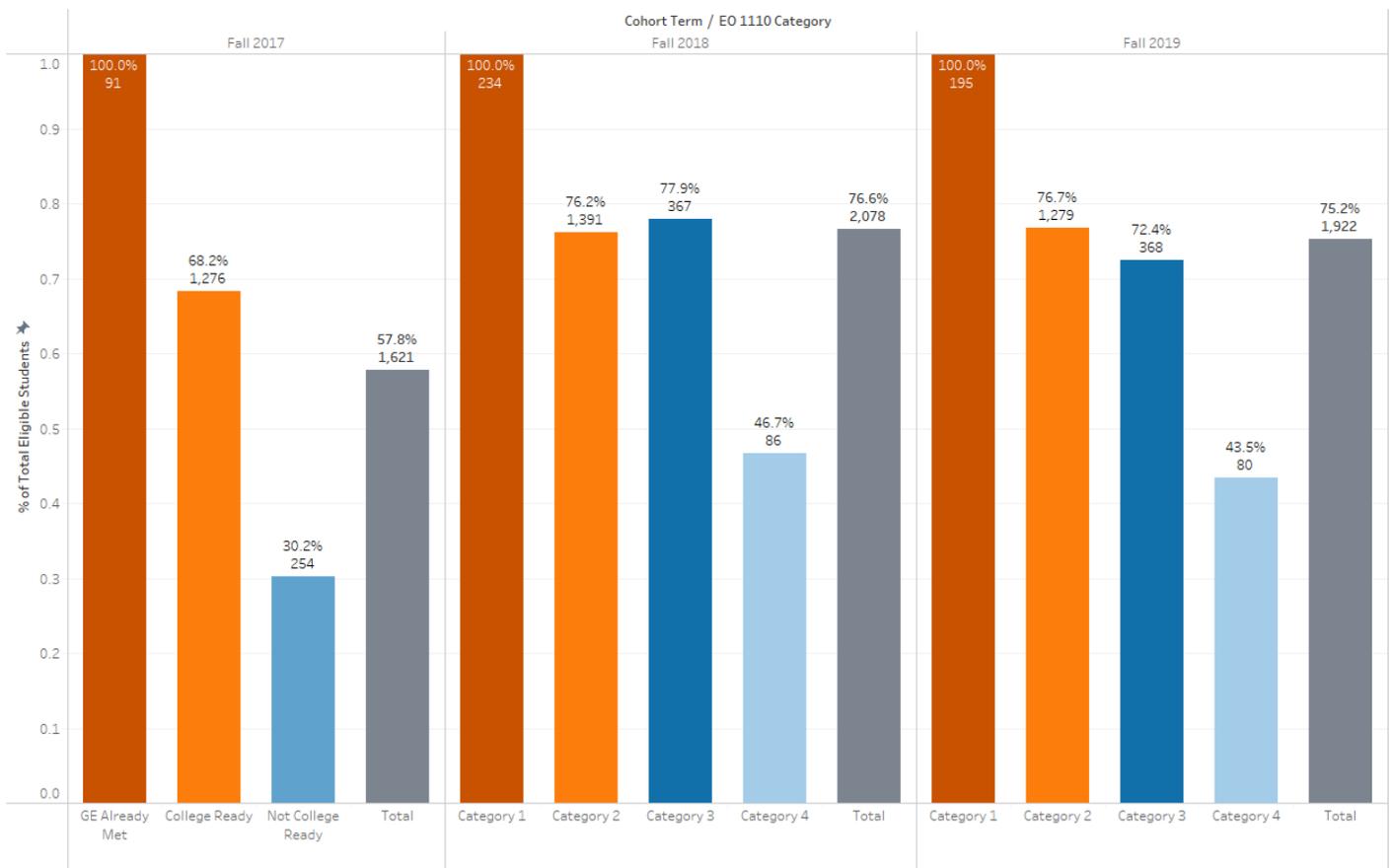


Figure 2. GE QR Completion Rates in Year 1 by EO 1110 Categories, Fall 2017 - Fall 2019 First-Time Freshmen Cohorts

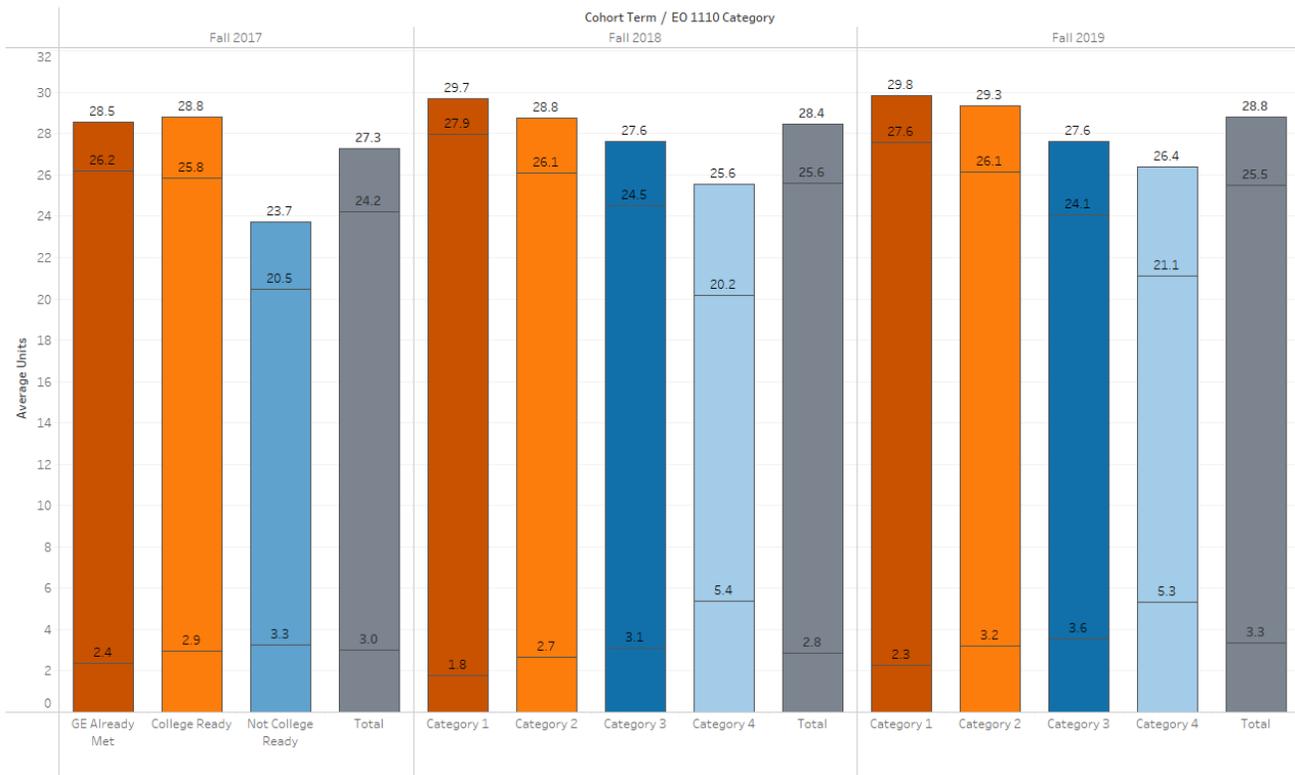


Figure 3. Average Units Attempted and Earned in Year 1 by EO 1110 Categories, Fall 2017 - Fall 2019 First-Time Freshmen Cohorts  
*Note: From the top of each bar downward, measures are as follows: Units Attempted, Units Earned, and Units Attempted minus Earned (differential)*

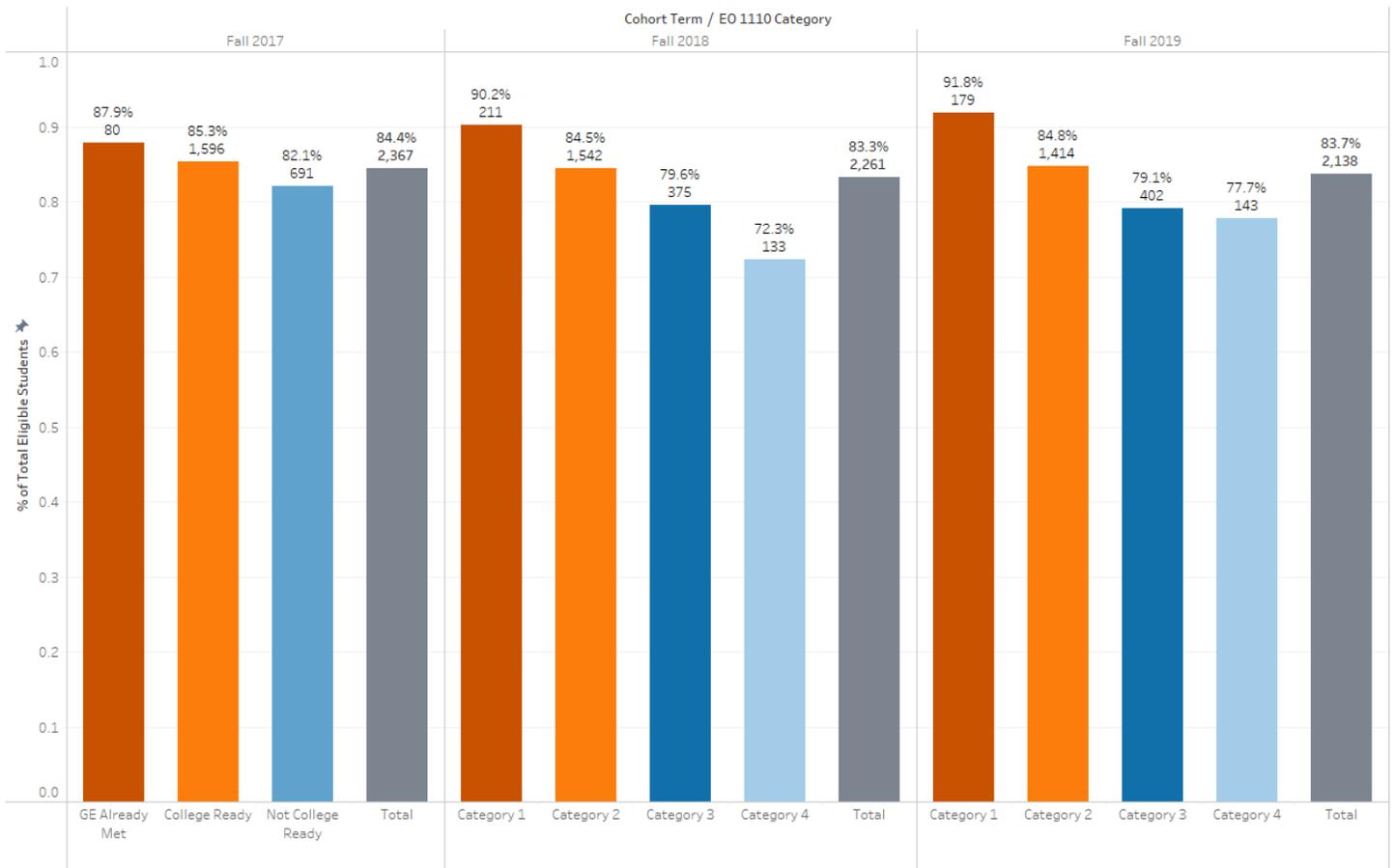


Figure 4. One-Year Retention Rates by EO 1110 Categories, Fall 2017 - Fall 2019 First-Time Freshmen Cohorts