



# Fall 2019 Opt Out Evaluation

Office Research & Equity

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## Background

In fall 2019, Cosumnes River College (CRC) implemented the first iteration of the new student Opt Out schedule. Entering students were provided with a schedule for their first term – including 15 units of course work and enrollment in math and English. Increasing unit load to 15 units has the potential to improve timely completion for new students at CRC. On the other hand, enrolling in more units could have unanticipated effects on students. For example, motivating students to take more units may result in lower success (e.g., due to time constraints, workload, etc.). The Research and Equity Office, therefore, evaluated the impact of the Opt Out schedule focusing on three primary questions. The first two questions pertain to enrollment, unit completion, and equitable implementation. The third question focuses on potential unanticipated effects:

**Question 1:** Did the Opt Out program improve transfer-level unit enrollment and completion for new students in their first term?

**Question 2:** Did all student groups participate in the program and enroll in 15 units equitably (e.g., at similar rates)?

**Question 3:** Did encouraging students to enroll in 15 units detriment their success and persistence?

## Summary of Findings

### Question 1

- 1) Students in fall 2019 enrolled in 15 units at significantly higher rates than students in fall 2018 (10.5% vs. 16.4%, respectively; *Table 2*, page 5) – suggesting that Opt Out improved unit enrollment.
- 2) As a result of the higher enrollment, students completed 15 transfer units at significantly higher rates (6.22% vs. 10.61%, respectively; *Table 3*, page 7). Additionally, students in fall 2019 also completed *slightly* more transfer-level units on average (6.02 vs. 6.65, respectively; *Table 3*, page 7).

### Question 2

- 1) In the fall 2019 cohort, there were no significant differences in 15 unit enrollment on the basis of race/ethnicity, first generation status, foster youth status, or gender. This suggests that many student groups participated equitably in the Opt Out program.
- 2) Students with higher high school GPAs in fall 2019 were more likely to enroll in 15 units. This suggests that students with a better academic record were more likely to participate in Opt Out (*Table 2*, page 5).
- 3) Students with a reported disability were less likely to enroll in 15 units (5.92%; *Table 2*, page 5), suggesting that they were less likely to participate in Opt Out.

### Question 3

- 1) Students who participated in Opt Out in fall 2019 did not have significantly lower first-term GPAs than students who enrolled in 15 units in fall 2018 (fall 2018: 2.63 vs. fall 2019: 2.66; *Table 4*, page 9).

- 2) Students who participated in Opt Out in fall 2019 did not withdraw from more units than students in fall 2018 who enrolled in 15 units (fall 2018: 1.76 average units vs. fall 2019: 2.18 average units; *Table 4*, page 9).
- 3) Students who participated in the Opt Out in fall 2019 did not have lower fall-to-spring persistence rates than students who enrolled in 15 units in fall 2018 (fall 2018: 90.74% vs. fall 2019: 92.46%; *Table 5*, page 10).
- 4) Persistence into 15 units in spring was low for students participating in Opt Out in fall 2019 but was not significantly different from fall 2018 (fall 2018: 37.04% vs. fall 2019: 36.59%; *Table 5*, page 10).

### Other Findings

- 1) Given the breadth of metrics used in this evaluation, it is difficult to highlight every observed difference. However, there were several statistically significant equity gaps with regards to GPA, units withdrawn, and transfer units completed. These differences can be observed within each of the tables presented in this document, and further analysis can be conducted upon request.

### Caveats and Conclusions

The findings presented here provide evidence to support the assertion that the Opt Out program improves 15 unit enrollment for new students at CRC in their first fall term. As a result of this increased enrollment, new students completed more transfer level units in their first term. Additionally, the students who enrolled in 15 units at CRC in fall 2019 did not exhibit notable declines in course success or persistence. This suggests that increased unit enrollment is not detrimental to course success – at least for the students who participated.

Nevertheless, there are some important caveats that must be noted. Most importantly, because of the wide reaching outreach/advising for the Opt Out program, not all Opt Out schedules were tracked. It was therefore difficult to determine who received an Opt Out schedule and who enrolled in 15 units voluntarily. As a result, all students in 15 units in fall 2019 were compared to students in fall 2018 – an imperfect comparison. The fall 2018 group would have been composed entirely of non-Opt Out students, and the fall 2019 group would have been composed of Opt-Out students and students who voluntarily enrolled in 15 units. With the aforementioned consideration in mind, the findings reported here should *still* be considered evidence for the effectiveness of Opt Out. Large changes in GPA, persistence, and other metrics would have been observed if a large number of Opt Out students were over-burdened by their unit load.

Additionally, because students could have voluntarily enrolled in 15 units without an Opt Out schedule, some of the year over year change in 15 unit enrollment could have been the product of other institutional initiatives (e.g., AB 705, increased awareness of unit requirements, etc.). Although analyses presented here controlled for demographic differences across fall 2018 and fall 2019, one cannot determine the specific impact of each one of these factors.

Finally, it should be noted that students who ultimately enrolled in their Opt Out schedule may be different from students who did not. This unquantified difference (e.g., motivation, aptitude, etc.) may explain why students in Opt Out did not have declines GPA. As such, one cannot entirely conclude that an increase in units for all students would not be detrimental to some.

### **Recommendations**

Given the findings, conclusions, and caveats of this evaluation, the Office of Research and Equity makes the following recommendations:

- 1) Proactively track students who receive an Opt Out schedule.
- 2) Increase participation in the Opt Out program (e.g. enrollment in 15 units) in order to improve average transfer-level unit completion.
- 3) Improve participation for students with lower high school GPAs, and investigate barriers to participation (e.g., financial aid, enrollment timing, etc.)
- 4) Explore reasons for why only 36-37% of students re-enroll in 15 units in spring using qualitative follow-up (e.g., surveys, focus groups, etc.)

## New Student Cohorts and Opt Out Participants

### *Fall 2018 and Fall 2019 Cohorts*

This study utilized data from the fall 2018 and fall 2019 cohorts of new students which had similar demographic characteristics. These demographic characteristics can be found in *Table 1*. For the purposes of this investigation, students were defined as new if they declared themselves as new (e.g. on their application) and had no experience prior to summer in the District. Demographics, enrollment data, course success data, and persistence data were gathered for these students in order to answer the three questions proposed in the background section of this report.

### *Opt Out Participants and Comparison Group*

Within the aforementioned cohorts (described in *Table 1*), a subset of students enrolled in 15 units (*Table 2*). New students in fall 2019 who saw an outreach specialist, counselor, or success coach received an Opt Out schedule. Unfortunately, not all of these activities tracked which students received an Opt Out schedule. Considering the wide reaching effort to provide Opt Out schedules, all new students who enrolled in 15 units at CRC in fall 2019 were considered to have participated in the Opt Out program ( $N = 451$ )<sup>1</sup>. The comparison group for these students (the *Opt Out* group) was students in fall 2018 who enrolled in 15 units ( $N = 270$ ; the *non-Opt Out* group). Data from the aforementioned cohorts and Opt Out groups were used to answer the evaluation questions presented in the background section of this report.

## Analysis Method

The analyses described in the next sections attempted to find differences (or lack thereof) between groups – either between the fall 2018/2019 cohorts generally or between Opt Out and Non Opt Out students. These analyses attempted to control for any alternative explanations for observed differences between groups. For example, consider the circumstance where we find a difference in unit load between fall 2018 and fall 2019. We would like to conclude that the difference is due to the Opt Out program. However, if a particular student group was more likely to enroll in more units, *and* that group was overrepresented in fall 2019, then the increase in unit load may simply be due to a larger representation of that group. Therefore, any demographic variable correlated with the outcome variable was statistically controlled prior to conducting Opt Out or cohort comparisons.

Generally speaking, two level outcomes (e.g. enrolled in 15 units vs. did not enroll in 15 units) were analyzed with logistic regressions assuming binomial error. On the other hand, continuous outcomes (e.g. unit load, GPA) were analyzed with least squares regressions.

*Table 1.* Demographics for Fall 2018 and Fall 2019 Cohort

Demographic	Fall 2018 (Non-Opt Out)		Fall 2019 (Opt Out)	
	Headcount	%	Headcount	%
<i>Race/Ethnicity</i>				

<sup>1</sup> See the “Caveats and Conclusions” section (Page 2) for a discussion of this methodological decision.

African Am.	274	10.64%	231	8.42%
API	742	28.83%	814	29.68%
Hispanic/Latino	815	31.66%	880	32.08%
Native Am.	10	0.39%	14	0.51%
Unknown/Other	214	8.31%	310	11.30%
White	519	20.16%	494	18.01%
<i>Gender</i>				
Female	1293	50.23%	1328	48.41%
Male	1244	48.33%	1367	49.84%
Not Reported	0	0.00%	1	0.04%
Unknown	37	1.44%	47	1.71%
<i>High School GPA</i>				
0 - .99	6	0.23%	11	0.40%
1 - 1.99	89	3.46%	132	4.81%
2 - 2.99	931	36.17%	1087	39.63%
3.0+	1155	44.87%	1196	43.60%
No GPA	393	15.27%	317	11.56%
<i>Reported Disability</i>	124	4.82%	152	5.54%
<i>Foster Youth</i>	70	2.72%	65	2.37%
<i>First Generation</i>	787	30.57%	740	26.98%
<b>Total</b>	<b>2574</b>		<b>2743</b>	

Table 2. Number/Percent Enrolling in 15 Units First Fall Term

Demographic	Fall 2018 (Non-Opt Out)			Fall 2019 (Opt Out)		
	Cohort Size	# in 15 Units	% of Total Cohort	Cohort Size	# in 15 Units	% of Total Cohort
<i>Race/Ethnicity</i>						
African Am.	274	22	8.03%	231	31	13.42%
API	742	100	13.48%	814	151	18.55%
Hispanic/Latino	815	62	7.61%	880	150	17.05%
Native Am.	10	1	10.00%	14	1	7.14%
Unknown/Other	214	23	10.75%	310	46	14.84%
White	519	62	11.95%	494	72	14.57%
<i>Gender</i>						
Female	1293	139	10.75%	1328	220	16.57%
Male	1244	127	10.21%	1367	223	16.31%
Not Reported	0			1	0	0.00%
Unknown	37	4	10.81%	47	8	17.02%
<i>High School GPA</i>						

0 - .99	6	1	16.67%	11	1	9.09%
1 - 1.99	89	9	10.11%	132	20	15.15%
2 - 2.99	931	81	8.70%	1087	159	14.63%
3.0+	1155	163	14.11%	1196	259	21.66%
No GPA	393	16	4.07%	317	12	3.79%
<i>Reported Disability</i>	124	5	4.03%	152	9	5.92%
<i>Foster Youth</i>	70	4	5.71%	65	6	9.23%
<i>First Generation</i>	787	67	8.51%	740	110	14.86%
<b>Total</b>	<b>2574</b>	<b>270</b>	<b>10.5%</b>	<b>2743</b>	<b>451</b>	<b>16.4%</b>

*Note.* New students enrolling in 15 units in fall 2019 are considered to be part of the *Opt Out* group, whereas new students in fall 2018 who enrolled in 15 units are the *Non-Opt Out* comparison group.

### Question 1: Analysis and Results

The first question of this study asked if the Opt Out program improved unit enrollment and transfer-level unit completion for new students. In order to address this question, the fall 2018 new student cohort was compared to the fall 2019 new student cohort on three primary metrics: fifteen unit enrollment rates, fifteen transfer unit completion rates, and average transfer unit completion. If the Opt Out schedule impacted first term student enrollment and unit completion, one might expect the fall 2019 cohort to have higher rates of 15 unit enrollment and higher rates of transfer-level unit completion.

#### *Fifteen Unit Enrollment Rates*

Fifteen unit enrollment rates for the fall 2018 and fall 2019 cohorts can be found in *Table 2*. Data were analyzed with logistic regressions assuming binomial error – an analysis typically conducted with a binomial outcome variable (e.g., enrolled in 15+ units vs. did not enroll in 15+ units). Across the two cohorts, various demographic variables were correlated with 15 unit enrollment rates: race/ethnicity ( $\Delta\chi^2(4) = 14.60, p < .01$ ), high school GPA ( $\Delta\chi^2(1) = 54.77, p < .001$ ), disability status ( $\Delta\chi^2(1) = 22.47, p < .001$ ), foster youth status ( $\Delta\chi^2(1) = 5.21, p < .05$ ), and first generation status ( $\Delta\chi^2(1) = 7.28, p < .01$ ). These variables could act as potential confounding variables. For example, if Hispanic/Latino students had a tendency to enroll in more units, and they were over-represented in the fall 2019 cohort, then any increases in fall 2019 could be attributed to over-representation of this group – and not the Opt Out program. With this in mind, the aforementioned demographic variables were statistically controlled for in the analysis. After controlling for these factors, there was a statistically significant difference in 15 unit enrollment,  $\Delta\chi^2(1) = 42.60, p < .001$ , such that students in the fall 2019 cohort were more likely to enroll in 15 units (10.5% vs. 16.4%, respectively; *Table 2*). This provides support for the assertion that the Opt Out program improved 15 unit enrollment rates.

#### *Fifteen Transfer Unit Completion Rates*

Fifteen transfer unit completion rates can be found in the *Table 3 below*. Data were again analyzed with logistic regressions assuming binomial error. Across both cohorts, various demographic variables were significantly correlated with 15 transfer unit completion rate: ethnicity ( $\Delta\chi^2(4) = 40.85, p < .001$ ), gender ( $\Delta\chi^2(1) = 13.03, p < .01$ ), high school GPA ( $\Delta\chi^2(1) = 309.78, p < .001$ ), disability status ( $\Delta\chi^2(1) = 20.42, p <$

.001), foster youth status ( $\Delta\chi^2(1) = 9.61, p < .01$ ), and first generation status ( $\Delta\chi^2(1) = 21.89, p < .001$ ). After controlling for these variables, there was a significant difference in 15 transfer unit completion rate,  $\Delta\chi^2(1) = 29.30, p < .001$ , such that students in the fall 2019 cohort completed 15 transfer units at higher rates (10.61% vs. 6.22%, respectively; *Table 3*). This provides support for the assertion that the Opt Out program improved 15 transfer unit completion rates.

#### *Average Transfer Units Completed*

The average number of transfer units completed can also be found in *Table 3*. Unlike the prior analyses, these data were analyzed with linear regressions, an analysis typically used with a continuous outcome variable (e.g., average number of units completed). Various demographic variables were correlated with average number of transfer units completed across both cohorts: ethnicity ( $F(4, 5312) = 21.24, p < .001$ ), gender ( $F(2, 5314) = 11.19, p < .001$ ), high school GPA ( $F(1, 4604) = 923.63, p < .001$ ), disability status ( $F(1, 5315) = 27.93, p < .001$ ), foster youth status ( $F(1, 5315) = 33.13, p < .001$ ), and first generation status ( $F(1, 5315) = 44.24, p < .001$ ). After controlling for these variables, there was a significant increase in the average number of transfer units completed ( $F(1, 4594) = 20.07, p < .001$ ), such that students in the fall 2019 cohort completed more transferable units on average. It should be noted, however, that this difference was small (.63 transfer units), and the significant finding was likely the product of large sample sizes.

*Table 3. Percentage Completing 15 Transfer Units and Average Number of Transfer Units Completed*

Demographic	Fall 2018 (Non-Opt Out)		Fall 2019 (Opt Out)	
	% Completing 15 Transfer Units	Average Transfer Unit Completion	% Completing 15 Transfer Units	Average Transfer Unit Completion
<i>Race/Ethnicity</i>				
African Am.	2.19%	4.31	6.93%	5.49
API	8.89%	6.74	12.90%	7.42
Hispanic/Latino	3.93%	5.74	8.98%	6.13
Native Am.	10.00%	4.60	14.29%	6.14
Unknown/Other	5.61%	5.77	7.74%	6.21
White	8.29%	6.49	13.16%	7.12
<i>Gender</i>				
Female	6.73%	6.50	12.80%	6.91
Male	5.55%	5.55	8.49%	6.39
Not Reported			0.00%	3.00
Unknown	10.81%	5.62	10.64%	6.76
<i>High School GPA</i>				
0 - .99	0.00%	1.83	9.09%	3.45
1 - 1.99	0.00%	2.89	0.76%	3.11
2 - 2.99	2.04%	4.50	5.24%	5.71
3.0+	11.69%	8.55	17.22%	8.74
No GPA	1.53%	3.00	8.20%	3.57



<i>Reported Disability</i>	0.00%	3.69	3.95%	5.42
<i>Foster Youth</i>	0.00%	2.86	4.62%	4.52
<i>First Generation</i>	3.30%	5.14	8.38%	6.00
<b>Total</b>	<b>6.22%</b>	<b>6.02</b>	<b>10.61%</b>	<b>6.65</b>

### Question 2: Analysis and Results

The second question of the study concerned equitable implementation of Opt Out. As such, the goal of the second analysis was to determine if certain groups of students in fall 2019 participated in Opt Out at higher rates<sup>2</sup>. Participation rates can be found in the “Fall 2019 (Opt Out)” column of *Table 2*. Data were analyzed with logistic regressions assuming binomial error (an analysis commonly conducted with a binomial outcome variable). Participation in *Opt Out* for new students in fall 2019 was compared across various demographic groups – race/ethnicity, gender, high school GPA, foster youth status, disability status, and first generation status. In fall 2019, students with higher high school GPAs ( $\Delta\chi^2(1) = 39.91, p < .001$ ) were more likely to participate in Opt Out. Students with a reported disability were significantly less likely ( $\Delta\chi^2(1) = 16.25, p < .001$ ). This suggests that students who performed better in high school may have been more likely to follow their opt-out schedule, whereas students with disabilities may have been less likely.

### Question 3 Analysis and Results

The final question of this evaluation concerned the impact of Opt Out on student success and persistence. New students enrolled in 15 units in fall 2019 (the Opt Out group) were compared to new students enrolled in 15 units in fall 2018 (the non-Opt Out group) on various metrics: first term GPA, first term average unit withdrawal, fall-to-spring persistence, and persistence in 15 units. If encouraging students to enroll in more units had a negative impact on success, one might expect to see lower GPAs, higher withdrawal, lower persistence, and lower 15 unit enrollment in the Opt-Out group.

#### *First Term GPA*

First term GPA for students enrolled in 15 units in fall 2018 (the non-Opt Out group) and students enrolled in fall 2019 (the Opt Out group) can be found in *Table 4*. Linear regressions were used to evaluate differences in GPA between the Opt Out and non-Opt Out group. Various demographic variables were significantly correlated with GPA across demographic groups: ethnicity ( $F(4,710) = 9.16, p < .001$ ), gender ( $F(2, 712) = 10.17, p < .001$ ), high school GPA ( $F(1, 686) = 303.98, p < .001$ ), foster youth status ( $F(1, 713) = 17.30, p < .001$ ), and first generation status ( $F(1, 713) = 4.20, p < .05$ ). After controlling for these variables, there was no significant difference in GPA between the Opt Out and non-Opt Out groups,  $F(1, 677) = 1.41, ns$ . This supports the assertion that unit load can be increased by the Opt Out program without detriment to course success.

#### *Average Units Withdrawn*

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<sup>2</sup> The correlations described in this section focus only on fall 2019 data (when the Opt Out program was implemented). Therefore, findings will be different than those described in the fifteen unit enrollment rates section – which used fall 2018 and fall 2019 data combined.

Average units withdrawn for first term students in the non-Opt Out vs. Opt Out groups can be found in *Table 4*. Data were again analyzed with linear regressions. Across both groups, several demographic variables were significantly correlated with units withdrawn: gender ( $F(2, 718) = 5.75, p < .01$ ), high school GPA ( $F(1, 691) = 54.14, p < .001$ ), and foster youth status ( $F(1, 719) = 11.52, p < .001$ ). After controlling for these variables, there was no significant difference in units withdrawn between the Opt Out and non-Opt Out groups,  $F(1, 687) = 1.98, ns$ . This suggests that the Opt Out program did not increase student withdraw rate – despite increases in unit enrollment.

*Table 4. GPA/W Units of First Term Students in 15 Units*

Demographic	Fall 2018 (Non-Opt Out)		Fall 2019 (Opt Out)	
	GPA	W Units	GPA	W Units
<i>Race/Ethnicity</i>				
African Am.	1.92	2.59	1.96	2.61
API	3.01	1.58	2.73	2.13
Hispanic/Latino	2.33	2.32	2.65	2.22
Native Am.	3.75	3.00	3.00	0.00
Unknown/Other	2.18	1.61	2.60	2.13
White	2.73	1.22	2.87	2.09
<i>Gender</i>				
Female	2.84	1.41	2.81	1.82
Male	2.39	2.20	2.50	2.54
Not Reported				
Unknown	3.26	0.00	2.87	1.91
<i>High School GPA</i>				
0 - .99	2.46	4.00	0.73	0.00
1 - 1.99	1.10	3.78	1.36	3.56
2 - 2.99	1.90	2.56	2.24	2.86
3.0+	3.01	1.29	3.01	1.62
No GPA	3.28	1.25	3.03	3.08
<i>Reported Disability</i>	2.70	3.20	2.66	3.11
<i>Foster Youth</i>	1.02	3.75	1.25	6.33
<i>First Generation</i>	2.54	2.10	2.48	2.29
<b>Total</b>	<b>2.63</b>	<b>1.76</b>	<b>2.66</b>	<b>2.18</b>

#### *Fall to Spring Persistence*

Fall to spring persistence rates can be found in *Table 5*. The Opt Out group was compared to the non-Opt Out group using logistic regression assuming binomial error. As previously stated, these analyses are typically used with a binomial outcome variable (e.g., persisted vs. did not persist). Two demographic variables across both groups were significantly correlated with persistence: gender ( $\Delta\chi^2(2) = 6.44, p <$

.05) and high school GPA ( $\Delta\chi^2(1) = 22.06, p < .001$ ). After controlling for these variables, there was no significant difference in fall to spring persistence,  $\Delta\chi^2(1) = 1.21, ns$ . This suggests that the additional unit load of the Opt Out program did not reduce fall to spring persistence.

#### *Persistence in 15 Units*

The percentage of students re-enrolling in 15 units in spring (a.k.a. persistence in 15 units) can be found in *Table 5*. Data were again analyzed with logistic regressions assuming binomial error. High school GPA was significantly correlated with persistence in 15 units,  $\Delta\chi^2(1) = 39.07, p < .001$ . After controlling for this variable, there was no significant difference between the Opt Out and non-Opt Out groups in 15 unit persistence,  $\Delta\chi^2(1) = 0.01, ns$ . This suggests that the Opt Out program did not change overall fall to spring 15 unit enrollment rates. However, it should be noted that persistence in 15 units was low overall in the Non-Opt Out and the Opt Out groups (37.04% vs. 36.59%, respectively).

*Table 5. Second Term Enrollment for Students in 15 Units in Their First Term*

Demographic	Fall 2018 (Non-Opt Out)		Fall 2019 (Opt Out)	
	Persisted to Spring	Persisted in 15 Units	Persisted to Spring	Persisted in 15 Units
<i>Race/Ethnicity</i>				
African Am.	86.36%	36.36%	83.87%	22.58%
API	91.00%	36.00%	94.04%	37.09%
Hispanic/Latino	88.71%	38.71%	91.33%	34.67%
Native Am.	100.00%	100.00%	100.00%	0.00%
Unknown/Other	91.30%	39.13%	93.48%	41.30%
White	93.55%	35.48%	94.44%	43.06%
<i>Gender</i>				
Female	94.96%	39.57%	94.09%	38.64%
Male	86.61%	34.65%	91.03%	34.08%
Not Reported				
Unknown	75.00%	25.00%	87.50%	50.00%
<i>High School GPA</i>				
0 - .99	100.00%	0.00%	100.00%	0.00%
1 - 1.99	77.78%	11.11%	70.00%	20.00%
2 - 2.99	83.95%	32.10%	91.19%	25.79%
3.0+	94.48%	41.10%	94.98%	44.79%
No GPA	93.75%	37.50%	91.67%	33.33%
<i>Reported Disability</i>	100.00%	40.00%	66.67%	44.44%
<i>Foster Youth</i>	75.00%	25.00%	100.00%	0.00%
<i>First Generation</i>	85.07%	28.36%	92.73%	32.73%
<b>Total</b>	<b>90.74%</b>	<b>37.04%</b>	<b>92.46%</b>	<b>36.59%</b>