



COSUMNES
RIVER COLLEGE

OFFICE OF RESEARCH & EQUITY

Spring 2021 Student Assistant Evaluation

Reported in fall 2021

Report authors:

Katy Wilson & Brandon Muranaka, Faculty Researchers



Background

At Cosumnes River College (CRC), the Student Assistant (SA) Program provides course specific support for students in English. Student tutors (SA's) attend a particular course for the full semester and organize help sessions outside of class. In recent terms, the SA Program has been impacted by the COVID-19 pandemic and subsequent move to remote classes; therefore, the Spring 2021 evaluation has also been modified. The purpose of this evaluation is to replicate/extend findings from previous evaluations of the English Student Assistant Program (from fall 2015 to fall 2017) and identify any changes in program effectiveness. Specifically, previous evaluations found that students that visited their SA *outside of class* were more likely to succeed in basic skills and college-level courses.

In spring 2021, 23 English courses at CRC were assigned an SA tutor who tracked student visits: two sections of ENGRD 310, six sections of ENGWR 108/300, two sections of ENGWR 110, and thirteen sections of ENGWR 300. Conversely, ten English sections were assigned an SA tutor, but student visits in those sections were not tracked: one section of ENGRD 310, three sections of ENGWR 108/300, three sections of ENGWR 110, and three sections of ENGWR 300. This evaluation report focuses on the 23 English courses that tracked SA usage.

Prior elements of the SA evaluation process are not implementable in the remote environment. The Office of Research and Equity used the fall 2020 semester to develop and test an evaluation plan for SA, which the Office then implemented in spring 2021. In previous terms, SA's were able to track individual interactions with students in out-of-class support sessions. Because SA's are now meeting with students during class, via email, Zoom, and sometimes phone, it is harder for them to track exact interactions with students. Therefore, SA's in spring 2021 were asked to track whether or not they had substantially worked with each student throughout the term. This "substantial" form of help could be either one interaction or many.

The evaluation described here focused on two primary questions for spring 2021: (1) does support from an SA tutor lead to higher rates of course success; and, (2) does attending SA reduce disproportionate impact in success among student groups? Note that for the purposes of this investigation, *course success* was defined as receiving an A, B, C, or P in a course.

Summary of Findings

1. Various factors predicted higher SA usage (Table 1):
 - a. Student age group was correlated with SA usage, such that students age 25 and older received SA help more often ($\Delta\chi^2(1) = 10.079, p < 0.05$).
 - b. English course was correlated with SA usage, such that students in ENGRD 310 were less likely to receive SA help ($\Delta\chi^2(3) = 23.459, p < .001$).
 - c. Differences between how each SA tutor reported "significant interaction" with students could account for some of the differences in SA usage across courses; e.g., tutors in some courses may have counted interactions that tutors in other courses did not.
 - d. Differences in how English courses implemented SA could account for some of the differences in SA usage across courses; e.g., some courses offer extra credit for SA, involve their SA tutors in in-class activities, or employ other more highly interactive implementation methods).
2. SA tutor support was correlated with increased success in English courses ($\Delta\chi^2(1) = 69.08, p > .001$), such that students who received SA support were 5 times as likely to pass their class compared to those who did not receive SA support (Table 2).



- Race was correlated with success in English courses ($\Delta\chi^2(7) = 18.509, p < .01$), such that White and Asian students had higher success rates.
- Age was correlated with success in English courses ($\Delta\chi^2(1) = 8.2509, p < .01$), such that students age 25 and older had higher success rates.
- English course was correlated with success ($\Delta\chi^2(3) = 11.316, p < .05$), such that students in ENGWR 300 had higher success rates.
- There could be a confound in the data that is inflating the correlation between SA use and success in English courses. It could be related to graded activities with SA, or extra credit related to SA support.
- While success rates increased for students who received SA support, it does not appear to close equity gaps (Table 2).

Caveats and Recommendations

Due to rapid changes under the COVID-19 pandemic, SA instructors are now meeting with students via email, Zoom, and sometimes phone; it is therefore harder for tutors to track exact interactions with students. SA tutors in spring 2021 were asked to track whether or not they had substantially worked with each student throughout the term. This “substantial” form of help could be either one interaction, or many. Therefore, this analysis is unable to associate number of visits to an SA tutor with course success. Additionally, due to the strong correlation between SA usage and course success, there could be a confound in the data related to graded activities with SA, or extra credit related to SA support.

In light of the findings and caveats, the Research and Equity Office makes the following recommendations:

- Given that SA usage was correlated with course success, consider how implementation in the online environment might continue to evolve to meet changing student needs.
- Consider reaching out to system-wide SA coordinators to hear how other SA programs are implementing practices to help close equity gaps in English courses.
- Given continued access gaps for some groups of students, study how different courses advertise and utilize SA tutors in their courses in order to share successful practices.
- Explore if SA usage is tied to grades or extra credit in certain courses, which could potentially impact the evaluation findings.

Data Tables

Table 1: Proportion of students with access to SA who used it

Race/Ethnicity	Number of Students	Used SA	Usage Gap
African American	67	25.37%	-5.89%
Asian	151	37.09%	5.83%
Filipino	29	20.69%	-10.57%
Hispanic/Latinx	163	31.90%	0.64%
Multi-Race	43	27.91%	-3.35%
Native American	Low N	Low N	Low N
Pacific Islander	12	25.00%	-6.26%
Unknown/Other	Low N	Low N	Low N
White	89	29.21%	-2.05%



Total	563	31.26%	
--------------	------------	---------------	--

Gender			
	Number of Students	Used SA	Usage Gap
Female	329	33.74%	2.48%
Male	228	28.07%	-3.19%
Unknown/Other	Low N	Low N	Low N
Total	563	31.26%	

Age			
	Number of Students	Used SA	Usage Gap
24 or younger	400	27.25%	-4.01%
25 or older	163	41.10%	9.84%
Total	563	31.26%	

Course			
	Number of Students	Used SA	Usage Gap
ENGRD 310	56	7.14%	-24.12%
ENGWR 108/300	125	38.40%	7.14%
ENGWR 110	41	39.02%	7.76%
ENGWR 300	341	31.67%	0.41%
Total	563	31.26%	

Table 2: Success rates for students in English courses that offered SA

Did Not Receive SA Help			
Race/Ethnicity	Number of Students	Success Rate	Success Gap
African American	50	38.00%	-6.96%
Asian	95	50.53%	5.57%
Filipino	23	34.78%	-10.18%
Hispanic/Latinx	111	38.74%	-6.22%
Multi-Race	31	38.71%	-6.25%
Native American	Low N	Low N	Low N
Pacific Islander	Low N	Low N	Low N
Unknown	Low N	Low N	Low N
White	63	58.73%	13.77%
Total	387	44.96%	
Received SA Help			
Race/Ethnicity	Number of Students	Success Rate	Success Gap
African American	17	70.59%	-10.66%
Asian	56	96.43%	15.18%
Filipino	Low N	Low N	Low N
Hispanic/Latinx	52	67.31%	-13.94%
Multi-Race	12	91.67%	10.42
Native American	Low N	Low N	Low N
Pacific Islander	Low N	Low N	Low N



Unknown	Low N	Low N	Low N
White	26	76.92%	-4.33%
Total	176	81.25%	

Did Not Receive SA Help			
Gender	Number of Students	Success Rate	Success Gap
Female	218	41.28%	-3.22%
Male	164	48.78%	4.28%
Total	382	44.50%	

Received SA Help			
Gender	Number of Students	Success Rate	Success Gap
Female	111	78.38%	-2.76%
Male	64	85.94%	4.8%
Total	175	81.14%	

Did Not Receive SA Help			
Age Group	Number of Students	Success Rate	Success Gap
24 or younger	291	41.92%	-3.04%
25 or older	96	54.17%	9.21%
Total	387	44.96%	

Received SA Help			
Age Group	Number of Students	Success Rate	Success Gap
24 or younger	109	80.73%	-0.52%
25 or older	67	82.09%	0.84%
Total	176	81.25%	

Did Not Receive SA Help			
Course	Number of Students	Success Rate	Success Gap
ENGRD 310	52	42.31%	-2.65%
ENGWR 108/300	77	33.77%	-11.19%
ENGWR 110	25	36.00%	-8.96%
ENGWR 300	233	50.21%	5.25%
Total	387	44.96%	

Received SA Help			
	Number of Students	Success Rate	Success Gap
ENGRD 310	Low N	Low N	Low N
ENGWR 108/310	48	70.83%	-10.42%
ENGWR 110	16	75.00%	-6.25%
ENGWR 300	108	87.04%	5.79%
Total	176	81.25%	