Evaluation of the English Student Assistant Program

CRC Research Office

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Background

Student assistants (SAs) are available in all basic skills English courses at Cosumnes River College (ENGWR 42, 58) to help with assignments in and out of class. In fall 2015, a total of 12 basic skills English sections (four sections of ENGWR 42; eight sections of ENGWR 58) had an SA available to provide assistance to 318 students. Given the scope of the SA program in basic skills English, the Research Office – in conjunction with key faculty and staff – sought to (1) evaluate the effectiveness and accessibility of help provided *outside of class* by basic skills English SAs and (2) to highlight potential equity differences in SA usage.

Summary of Findings

- 1. Students who sought help from their SA outside of class were more successful in basic skills English, and students who visited their SA more often were more likely to be successful. Note that success was defined as receiving an A, B, C, or P in an English course.
- 2. Only 38.2% of students (96 out of 251 where data were available) visited the SA outside of class for help. However, a total of 81.8% of surveyed students were aware that their class had an SA.
- 3. Older students were more likely to seek help from their SA outside of class. No significant differences were found for student gender and ethnicity.
- 4. Simply increasing the number of times *all* students seek help outside of class has the potential of reducing equity differences in success (see *Table 3*, page 4), although encouraging African American and Hispanic/Latino(a) students to seek help more often would also be effective.
- 5. Students who did not seek help most frequently cited scheduling difficulties and/or lack of need as reasons for not visiting their SA outside of class.
- 6. In general, SAs reported that students often waited too long to get help, felt they did not need help, or were otherwise embarrassed to seek help.
- 7. All faculty said they encouraged students to seek help from their SA verbally in class, but only half incentivized usage. Moreover, some faculty requested that more information be provided regarding the capacity of their SA.

Limitations

There are two notable limitations to the present investigation. First, students who choose to seek help from their SA might be different from other students in motivation and/or other psychological factors. The difference between students who seek and do not seek assistance might therefore be explained by motivation – and not necessarily help from their SA. Second, the response rates for surveys were very low and may not necessarily be representative of the full student population.

Recommendations

Overall, the findings regarding the effectiveness of SAs were positive. However, steps must be taken to increase usage of SAs – both to improve overall student success and to reduce equity differences in course success. One might improve usage by taking any of the following (non-exhaustive) steps:

- 1) Conducting a study on the types of incentives that motivate students to seek help from their SA outside of class.
- 2) Incentivizing basic skills students to visit their SA a minimum number of times outside of class.
- 3) Developing methods for encouraging African American/younger students to seek help.
- 4) Providing information on SA hours before course enrollment begins (e.g. in the course schedule) so students can select a course section with SA hours that fit their schedule.

- 5) Improving communication about when students should seek help.
- 6) Reducing the stigma and potential embarrassment of seeking help from an SA.
- 7) Informing faculty who have never had an SA about the capacity of their SA.

Student SA Usage and Success

Method

Shortly after fall 2015 census, the Research Office generated SA attendance tracking sheets for all basic skills English courses. These tracking sheets were then used by SAs to record the number of times each student sought help from their SA *outside of class* on a weekly basis. At the end of the fall 2015 semester, the tracking sheets were returned to the Research Office. The Research Office then merged these sheets with demographic and official grade data in early February 2016. The resulting dataset was used to test the association between SA usage and success and to evaluate potential equity differences in program usage. Note that success was defined as receiving an A, B, C, or P in a basic skills English course.

Student Population Description and Usage Rates

Of the 12 tracking sheets provided by the Research Office, two were not returned by SAs. Additionally, eighteen students in the remaining 10 courses did not have attendance data. Therefore a total of 251 students from ten courses were used in the present investigation. A demographic breakdown of students who had available attendance data with accompanying success rates can be found in *Table 1*. Note that Multi-Race and Native American students were not used in the present analysis due to small sample sizes. In addition, a summary of SA visits and accompanying success rates can be found in *Table 2*. In total, only 38.2% (N = 96) of students visited their SA for help outside of class. Finally, the frequency of SA visits by week can be found in *Figure 1*. The number of visits peaked in late September, dipped, and peaked again in late November.

Table 1. Student Demographic Summary Data

	Headcounts		Course Success	
Student Demographic Variables	N	%	N	%
Gender				
Female	128	51.0%	80	62.5%
Male	121	48.2%	79	65.3%
Unknown	2	0.8%	2	100.0%
Ethnicity				
African American	47	18.7%	20	42.6%
API	79	31.5%	65	82.3%
Hispanic/Latino(a)	73	29.1%	44	60.3%
Multi-Race/Unknown/Other	11	4.4%	6	54.5%
Native American	1	0.4%	0	0.0%
White	40	15.9%	26	65.0%
Age		22.04		
Total	251		161	64.1%

Table 2. SA Visits by Demographic Variables

	Headcount			Course Success	
Student Demographic Variables	Visited (N)	Visited (%)	Average Visits	Visited	Did Not Visit
Gender					
Female	46	35.9%	1.59	78.3%	53.7%
Male	48	39.7%	1.35	75.0%	58.9%
Unknown	2	100.0%	3.50	100.0%	
Ethnicity					
African American	22	46.8%	1.45	59.1%	28.0%
API	30	38.0%	1.23	96.7%	73.5%
Hispanic/Latino(a)	24	32.9%	1.44	62.5%	59.2%
Multi-Race/Unknown/Other	5	45.5%	3.00	80.0%	33.3%
Native American	0	0.0%	0.00		0.0%
White	15	37.5%	1.78	86.7%	52.0%
Total	96	38.2%		77.1%	56.1%

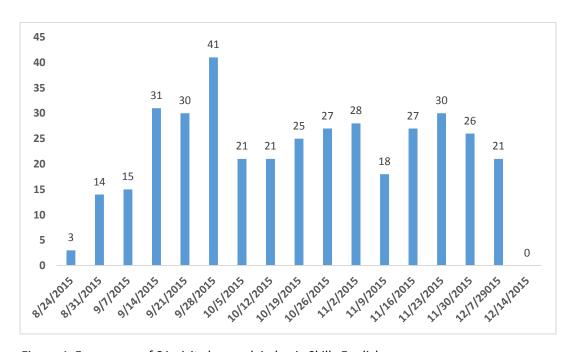


Figure 1. Frequency of SA visits by week in basic Skills English.

Analysis (Technical Specifications)

A logistic regression model, assuming a quasi-binomial error term (commonly used to test for differences in binomial outcome variable), was used to predict the probability of student success from the number of times a student visited their SA. Prior to entering the number of visits as a predictor, the demographic variables age, gender, and ethnicity were entered as predictors of student success. Only ethnicity significantly predicted a student's probability of success, $\Delta\chi_2(3) = 22.1$, p < .001. African American students had a 42.6% probability of success; API students had an 82.3% probability of success; Hispanic/Latino(a) students had a 60.3% probability of success; and White students had a 65.0% probability of success. In the next step, the number of times a student visited their SA was entered as a predictor of student success. The number of visits was significantly and positively associated with a student's probability of success, $\Delta\chi_2(1) = 9.77$, p < .01, such that students with more visits to their SA had a higher chance of being successful.

Interestingly, because the increase in probability per single SA visit is non-linear, simply increasing the average number of visits for *all* students could reduce achievement gaps between ethnic groups. *Table 3* presents the projected probability of success by ethnic group from zero to nine visits. The column "Avg Difference" is a measure of the average difference in probability of success between groups. Note that as the number of visits increases, the average difference in probability decreases. Also note that it would take African American students seven visits and Hispanic/Latino(a) students three visits to the SA to reach a 70% probability of success.

Table 3. Probability of Success by Ethnic Group and Number of Visits

	Pro				
Number of					
Visits	African American	Hispanic/Latino(a)	Asian	White	Avg. Difference
0	34.7%	54.5%	79.1%	59.9%	15.8%
1	39.9%	60.1%	82.6%	65.2%	15.2%
2	45.5%	65.4%	85.6%	70.2%	14.3%
3	51.1%	70.3%	88.2%	74.7%	13.3%
4	56.8%	74.8%	90.4%	78.7%	12.1%
5	62.2%	78.8%	92.2%	82.3%	10.8%
6	67.4%	82.4%	93.7%	85.3%	9.5%
7	72.1%	85.4%	94.9%	88.0%	8.3%
8	76.5%	88.0%	95.9%	90.2%	7.1%
9	80.3%	90.2%	96.7%	92.0%	6.0%

Note. The "Avg. Difference" column presents the average difference in the probability of success between groups. Interestingly, the average difference decreases as the number of visits increases.

Next, a regression model, assuming a quasi-poisson error term (commonly used to test for differences in count/rate data), was used to identify differences in SA usage across student groups. While there were no significant differences for race or gender, age was significantly associated with the number of student visits, $\Delta \chi_2(1) = 76.12$, p < .001, such that older students were more likely to visit their SA for help.

Survey Data and Perceptions of the SA Program

Method

Four online surveys were administered to faculty, SAs, and students in order to gauge knowledge and perceptions of the program. Two surveys were designed for students: a baseline survey which was administered during the last two weeks in September and a follow-up survey which was administered during the first two weeks in December. The baseline survey asked students if they knew of the SA program and whether or not they had used or intended to seek help from an SA. The follow-up survey asked students if they knew about their SA, whether or not they sought help from their SA, why they did or did not seek help, and if their SA was helpful/approachable. Another survey was administered to faculty during the month of December. This survey asked how each faculty member encouraged students to seek help from the SA and if the SA was accessible/helpful to students. Finally, a survey was also administered to SAs in the month of December. This survey asked about communication between the faculty member and the SA and how the SA encouraged participation. It should also be noted that all surveys administered in December asked for general comments and feedback on the program from participants.

Student Baseline and Follow-Up Surveys

A total of 86 students (out of 314) completed the baseline survey. All of them were aware that the course had an SA. The vast majority said they intended to seek help from their SA (97.6%) and 61.6% had not yet sought help from their SA.

A total of 55 students (out of 319) completed the follow-up survey. Most of the student respondents knew that their course had an SA (85.5%) and most of the respondents had sought help from their SA (81.8%). Forty of the students provided a reason for seeking help. The largest portion of these students said that they sought help to improve their grade (37.5%). The ten students that did not seek help provided varied reasons. Some stated that they did not need help and other cited scheduling conflicts. A total of 97.6% of students (out of 41 respondents) agreed that their SA was helpful, approachable, and knowledgeable, and 97.6% (out of 41 respondents) said that they would recommend the program to a friend.

Faculty Survey

Six faculty members (out of 10) completed the faculty survey. All of the faculty members indicated that they verbally encouraged students to seek help from their SA, and half indicated that they incentivized students to seek help. The majority of faculty members agreed that their SA attended class punctually, encouraged students to seek help, made him/herself accessible, had good rapport with students, provided helpful assistance, and communicated well. Finally, although most faculty said that they would recommend the program to other English faculty, comments indicated that communication about the capacity of SAs could be improved.

Student Assistant Survey

Only four SAs completed the SA survey. All of the respondents agreed that expectations were made clear and that their faculty member communicated expectations clearly. Additionally, all of the respondents were either satisfied or very satisfied with their communications with the instructor, the help provided by the instructor, the accessibility of the instructor, and the attendance tracking materials provided by the Research Office. Whereas all respondents encouraged attendance on a weekly basis,

several identified potential barriers for students seeking help from an SA. Specifically, some thought that students may not know when they should seek help and may seek help too late; others thought that students might be too embarrassed to seek help; and yet others cited scheduling difficulties.