Institutional Effectiveness, Research, & Planning

Reading Success Center Data Report 2015-16

Feb. 23, 2017

Please note this report will be prepared annually, each summer. Due to circumstances beyond our control, reporting was delayed (Jan. 2017).

This report examines the relationship between visiting Cerritos College's Reading Success Center (RSC) and academic outcomes of students enrolled in a Reading course during the 2015-16 school year. The report also compares academic outcomes between students who chose to visit the RSC and those who did not visit.

Executive Summary

Students who visited the Reading Success Center were more likely pass and complete Reading courses than those who did not. Similarly, students who visited the center more often were more likely to pass their course than students who visited less frequently.

Details of the Data

A total of 157 students visited the Reading Success Center during the 2015-16 school year. The students visited the center 425 times and spent about 322 hours there (Table 1). Of the students that used the RSC, most visited between one to five times (Figure 1). A majority (90) of the students who visited the center were enrolled in a Reading course sometime during the school year. About 3% of students who enrolled in a Reading course chose to visit the Reading Success Center (90 of a total 3,214 students enrolled in a Reading course).

Table 1. Frequencies for Reading Success Center Student Visits

Variable	Minimum	Maximum	Total	Median	Mean
Visits	1.00	13.00	425.00	2.00	2.71
Minutes	0.60	666.28	19372.52	84.60	123.39
Hours	0.01	11.10	322.88	1.41	2.06

Figure 1. Counts of RSC Student Visits
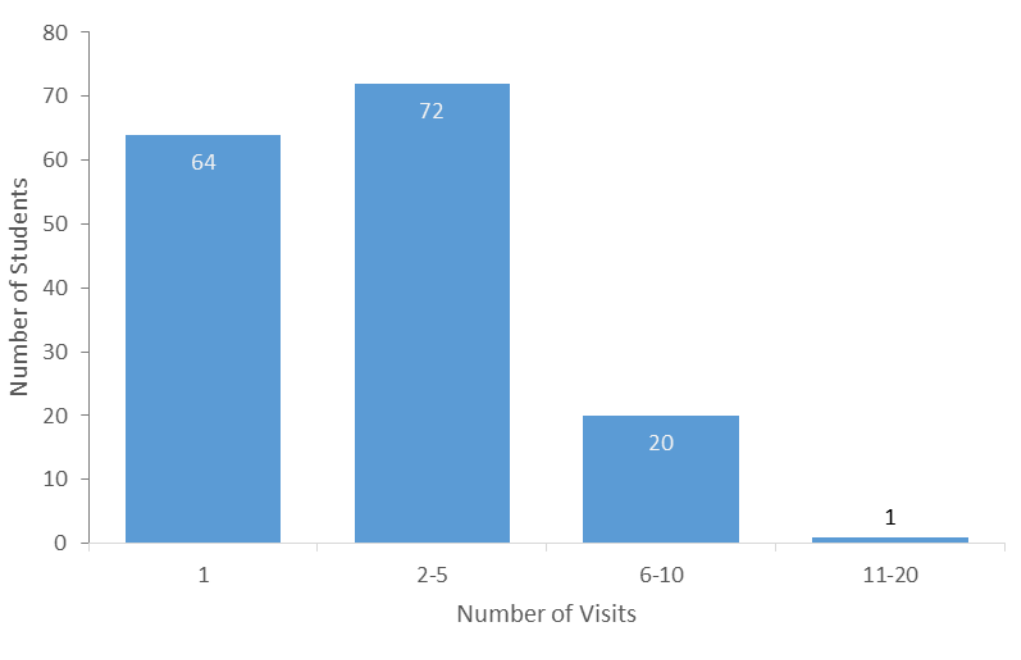
Reading Enrollments by Course

Table 2 shows the number of enrollments in each Reading course. The middle column shows the number of enrolled students that visited the RSC. The last column shows the total number of students enrolled in the course throughout the 2015-16 school year. Reading 54 had the highest number of enrollees who visited the RSC (44) and the highest total number (1857).

Table 2. RSC Enrollments by Reading Course

Reading Course	Visited ESC*	Total
44	3	190
48	14	779
49	34	859
54	44	1857
97	36	287
200	4	286
Total	135	4258

Students may be enrolled in multiple courses in the same term and throughout the school year.

Demographic Data for RSC Users

Tables 3 through Table 5 show demographic data by enrollment for students who used the Reading Success Center and students who did not use the center. Table 3 shows that RSC users have a higher proportion of female students than the non-user group. Tables 4 and 5 show that the two groups had similar ethnic and age composition.

Table 3. Comparison of RSC Users and Non-Users Enrolled in a Reading Course by Gender

Gender	RSC Users		Non-Users	
	Count	Percent	Count	Percent
Female	70	78%	1868	60%
Male	17	19%	1215	39%
Unknown	3	3%	41	1%
Total	90	100%	3124	100%

Table 4. Comparison of RSC Users and Non-Users Enrolled in a Reading Course by Ethnicity

Ethnicity	RSC Users		Non-Users	
	Count	Percent	Count	Percent
Asian	17	19%	537	17%
Black	3	3%	65	2%
Hispanic	64	71%	2154	69%
White	0	0%	46	1%
Other	6	7%	322	10%
Total	90	100%	3124	100%

Table 5. Comparison of RSC Users and Non-Users Enrolled in a Reading Course by Age Range

Age Group	RSC Users		Non-Users	
	Count	Percent	Count	Percent
19 or younger	27	30%	759	24%
20-24	39	43%	1692	54%
25-29	7	8%	355	11%
30-34	6	7%	122	4%
35-39	4	4%	89	3%
40-49	6	7%	67	2%
50 or older	1	1%	40	1%
Total	90	100%	3124	100%

Academic Outcomes

GPA and Units Earned. Overall, students who used the Reading Success Center had better academic outcomes than students who did not use it. Table 6 shows that RSC users had higher cumulative GPAs, earned more units during the 2015-16 school year, and obtained more cumulative units.

Table 6. Means and standard deviations of academic outcomes for RSC Users and Non-Users

Outcome	RSC Users		Non-Users	
	M	*SD*	*M*	*SD*
Cumulative GPA	2.62	.98	2.09	1.34
Term Units	9.12	3.80	7.13	4.69
Cumulative Units	21.24	19.2	20.83	21.39

Student Success. Success rate was defined as the percentage of students earning a grade of A, B, C, or P (passing). Failure was defined as a student earning a grade of W, D, F, FW, or NP (not passing). Table 7 compares success rates for RSC users and non-users by course. RSC users had higher success rates in all Reading courses. A chi-square test indicated that RSC users had higher overall rates of student success than non-users, χ^2 (1) = 8.01, *p* = .01. We calculated the Relative Risk to assess the size of the effect of visiting the RSC on student success. This analysis showed that the risk of failure almost doubled (RR = 1.98) for students who did not visit the learning center.

Table 7. Success Rates by Reading Course for RSC Users and Non-Users

Reading Course	RSC Users		Non-Users	
	Total Enrolled	Success Rate	Total Enrolled	Success Rate
44	3	100%	116	78%
48	13	100%	509	81%
49	26	92%	586	80%
54	36	86%	1237	75%
97	31	81%	159	79%
200	3	100%	196	70%
Total	112	88%	2803	77%

Completion. Completion rate was defined as the percentage of students that earned a grade in the course (A, B, C, D, F, P, or NP) and did not withdraw. RSC users had higher completion rates in all Reading courses. A chi-square test indicated that RSC users were more likely to complete Reading courses than students who did not visit the RSC, χ^2 (1) = 10.04, *p* = .002. Further analysis showed that the risk of failure to complete a course tripled (RR = 3.43) for students who did not visit the learning center.

Table 8. Comparison of Completion Rates for RSC Users and Non-Users Enrolled in a Reading Course

Reading Course	RSC Users		Non-Users	
	Total Enrolled	Completion Rate	Total Enrolled	Completion Rate
44	3	100%	116	81%
48	13	100%	509	87%
49	26	92%	586	88%
54	36	92%	1237	83%
97	31	100%	159	88%
200	3	100%	196	82%
Total	112	96%	2803	85%

Frequency of RSC Visits and Course Outcomes

RSC users were categorized according to their total number of visits during the 2015-16 school year. The categories were: minimal user (1 visit), casual user (2-5 visits), moderate user (6-10 visits), and frequent user (11-20 visits). The final two columns of Table 9 show the success and completion rates for each user type. The columns show increases in success and completion as the frequency of visits increases. We used multilevel models to assess whether these changes were statistically significant. Table 10 shows that each visit to the

Reading Success Center was associated with a 57% increase in a student's odds of success (OR=1.57). However, there was no statistically significant relationship between the number of visits to the center and completion of a Reading course.

Table 9. RSC User Profile Data

User Type	RSC Students		Visits			Outcome Rates	
	Number	Percent	Range	Average Number	Average Time	Success	Completion
Minimal	36	27%	1	1.00	0.83	81%	94%
Casual	72	53%	2-5	3.06	2.56	88%	95%
Moderate	26	19%	6-10	6.4	4.39	100%	100%
Frequent	1	1%	11-20	13.00	8.83	100%	100%
Total	135	100%		2.71	2.5	88%	96%

Table 10. Multilevel Model Results Predicting Student Success from Number of Visits

	Fixed Effects				
Variable	B	Odds Ratio	SE	z-ratio	p
Intercept	0.96	2.61	0.59	1.63	0.10
Visits	0.45	1.57	0.22	2.01	0.04
	Random Effects				
Variable	Variance		SD		
Course	0.14		0.37		

Table 11. Multilevel Model Results Predicting Course Completion from Number of Visits

	Fixed Effects				
Variable	B	Odds Ratio	SE	z-ratio	p
Intercept	2.26	9.56	0.80	2.84	<.001
Visits	0.30	1.35	0.29	1.03	0.30
	Random Effects				
Variable	Variance		SD		
Course	<.001		<.001		