

**Fall 2015 Classroom Tutoring Student Demographics and Outcomes
(Spring 2016)**

Project Background and Methodology

As one component of the Proyecto Exito grant evaluation, the present study was conducted to examine the implementation of the Classroom Tutoring program in its first semester at San Diego Mesa College, student access to Classroom Tutoring (CT) by student demographics and to compare outcomes of students who attended and did not attend CT sessions. The Classroom Tutoring program follows the national model for Supplemental Instruction, which was initially launched by the University of Missouri, Kansas City. The model includes the following components:

- A student who was successful in the given course in a previous semester attends (as an observer) all meetings of the CT-designated class
- This student, who serves as the Classroom Tutor, facilitates outside-of-class group learning sessions for students who volunteer to participate in the program.
- CT sessions include opportunities for students to discuss readings, learn and develop learning strategies and tools, and review course content in a group setting.
- The ultimate goals of the CT program are to improve retention in historically difficult courses, improve student grades in historically difficult courses, and increase the graduation rates of students.

To this end, student demographics, course enrollment, and grade data were obtained from the SDCCD information system for students enrolled in CT-designated course sections in the fall 2015 semester. Additionally, Classroom Tutoring attendance data were provided by the CT Coordinator and then linked to student enrollment information. The project centered on the following research questions:

- Do students who participate in Classroom Tutoring differ, demographically and academically, from students who do not?
- Do students who participate in Classroom Tutoring perform better in their CT-assigned courses than students who do not participate in CT?

Students were included in the analysis if they had a valid end-of-term enrollment in any of the course sections for which Classroom Tutoring was offered in fall 2015. The courses that offered Classroom Tutoring sessions in fall 2015 included the following:

- English 43 (one section),
- English 47A (two sections),
- English 49 (one section),
- English 101 (four sections), and
- Math 92 (two sections).

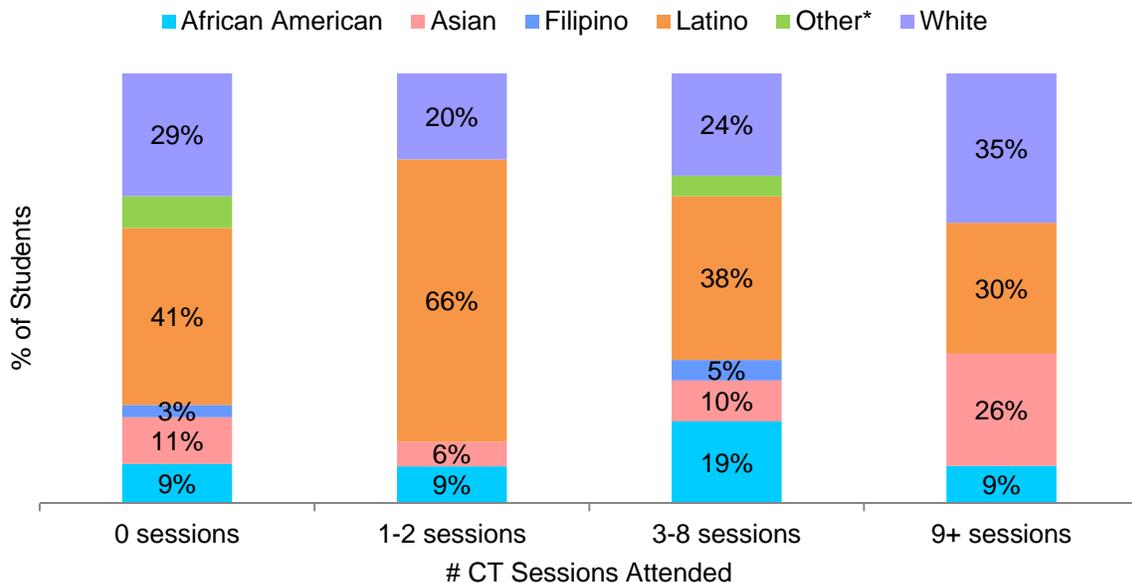
To address the first research question, students were grouped into two categories: those who attended at least one Classroom Tutoring session and those who did not attend any sessions. The data were then further disaggregated by student age, gender, ethnicity, and foster youth status. After analyzing the variability in student attendance data and to examine student outcome results on a more granular level, number of sessions attended were modified into four categories: 0 sessions attended, 1-2 sessions attended, 3-8 sessions attended, and 9 or more sessions attended. Overall enrollment, retention rates, and success rates by the number of Classroom Tutoring sessions were provided. Additionally, course-level enrollment, retention rates, success rates, and average GPA were reported. A summary of the study's findings is provided on the following pages. Data tables illustrating detailed findings are provided in Appendix A.

Summary of the Findings

Demographics

Overall, access to Classroom Tutoring was rather equitable in terms of age, ethnicity, and foster youth status. The percentages of students in each group were similar regardless of whether they attended CT sessions. However, more female students attended CT sessions than not, whereas the reverse was true of male students, suggesting a slight gender inequity in student access to CT sessions. When demographic data were disaggregated by CT session attendance, it became clear that the ethnic composition of the attendance categories varied in a couple of ways (see Figure 1). For example, although Latino students constituted 66% of the students that attended 1-2 CT sessions, they were only 38% and 30% of those students attending 3-8 and 9 or more CT sessions respectively – even though they make up almost half of the students enrolled in CT sections. On the other hand, two ethnic groups were better represented within the higher attendance categories. The proportion of white students increased from 20% of the students that attended 1-2 CT sessions to 35% of those that attended 9 or more. Similarly, Asian students were 6% of those that attended 1-2 CT sessions, but were 26% of those that attended 9 or more even though they make up only 13% of the students enrolled in CT sessions.

Figure 1. CT Attendance by Ethnicity



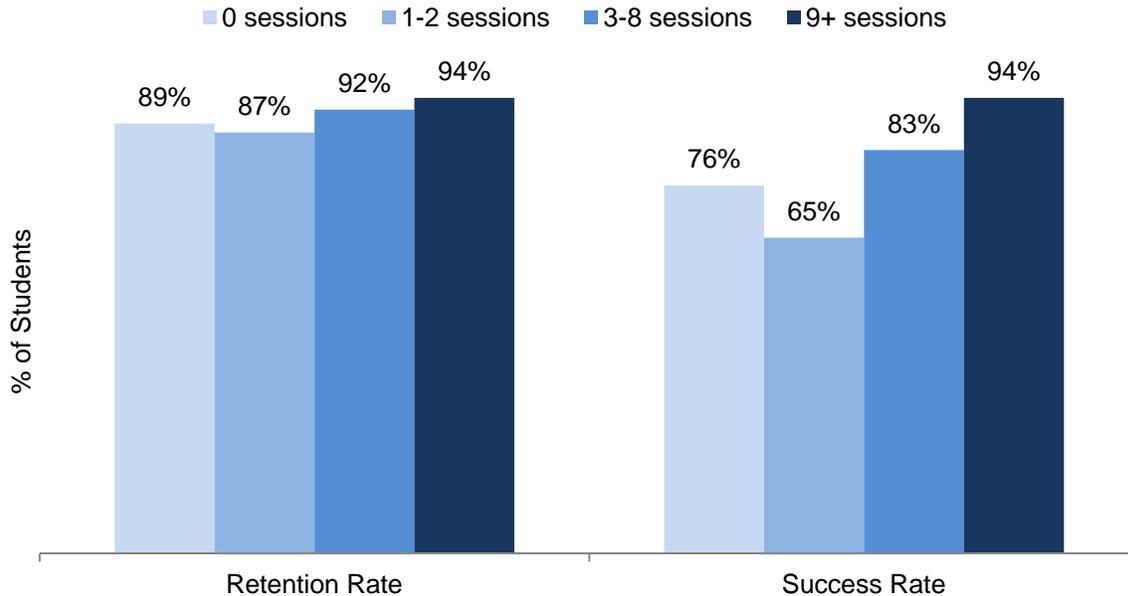
*Other includes American Indian, Unreported, and Other categories. The three categories were collapsed into one because of the small number of students included.

Retention and Success Rates

Enrollments were largest, by far, for those who did not attend any CT sessions. Overall retention rates were higher among students who attended at least one session than those who did not attend any classroom tutoring. The retention rates between those who attended 1-2 and 3-8 sessions were similar, with students attending 9 or more CT sessions showing the highest retention rate. The retention rates within each course also tended to increase with the number of sessions attended, although there was more variation due to smaller sample sizes (see Figure 2).

Overall success rates were also highest for students who attended 9 or more sessions, followed in order by those who attended 3-8 sessions, no sessions, and finally, 1-2 sessions. This same pattern in which students who attended 1-2 sessions had the lowest success rates was displayed within each course, with the exception of Math 92, suggesting the need for additional inquiry into the needs and challenges faced by the subpopulation of students who attended only a few sessions (see Figure 2).

Figure 2. Success and Retention Rates by CT Session Attendance



Course Performance

Among the courses that had students who attended 9 or more CT sessions (English 47A, English 101, Math 92), those who experienced the highest average GPA were students in that group, followed by those who attended 3-8 sessions. For students in English 47A and Math 92, those who attended at least one CT session also had higher GPAs than those who attended none, although the opposite was true for those enrolled in English 101. For those enrolled in English 43 and English 49, the students with the highest average GPAs were those who did not attend any CT sessions; however, neither of these courses included students who attended 9 or more tutoring sessions, and no one in the English 43 section attended more than two tutoring sessions, making the results less interpretable.

Figure 3. Distribution of English Grades by CT Session Attendance

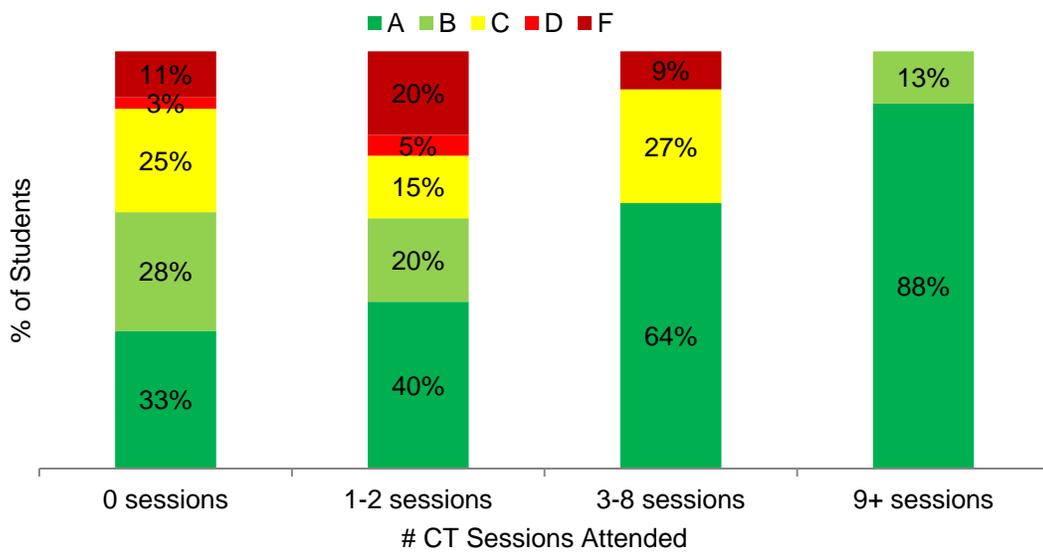
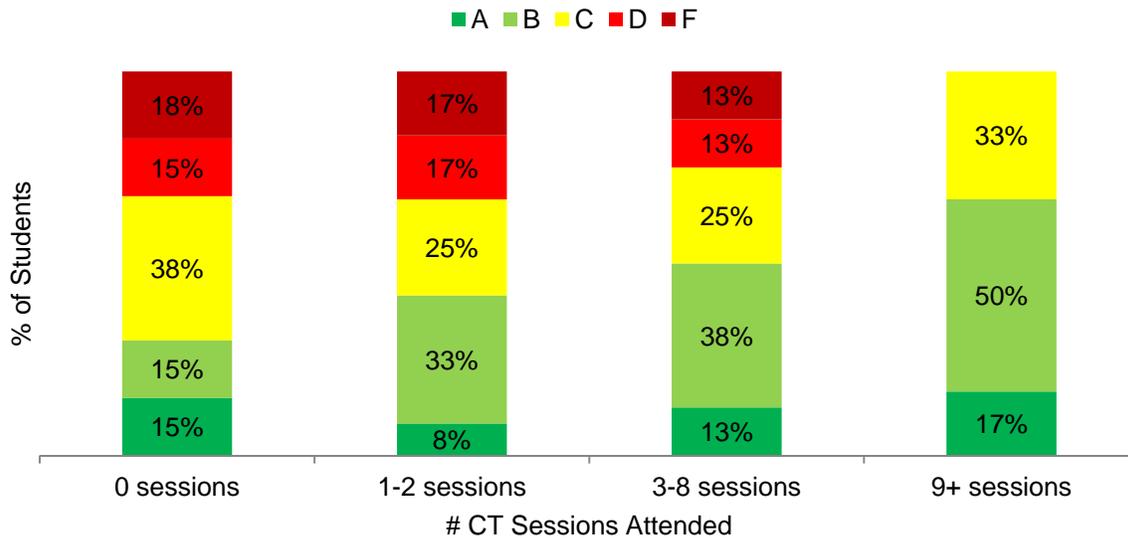


Figure 4. Distribution of Math Grades by CT Session Attendance



Recommendations

The students with the best course outcomes were those who attended the most sessions, but those who attended 3-8 sessions also tended to do well in the course. The same level of achievement was not shown for students who attended only one or two CT sessions. In fact, the students who attended none of the CT sessions tended to have better outcomes than those who attended only a few. These findings suggest that students may need to participate in classroom tutoring regularly to maximize their chances of success. Thus, it would be advantageous to encourage students to attend as many sessions as possible throughout the semester and to provide additional information to students about the goals and structure of Classroom Tutoring (in comparison to regular on-campus tutoring). Moving forward, given the improved performance of students who regularly participated in CT sessions, it will be important to ensure that access to CT sessions is equitable and that outreach efforts are inclusive of all student subpopulations. While the present study provides some preliminary information on the potential impact of the Classroom Tutoring program, additional data and analyses are needed in order for the College to gain a more comprehensive understanding of how the program is working for Mesa students, both in process and in student outcomes. Furthermore, future studies of the program's impact should examine the impact of CT session attendance controlling for other factors related to student success. This would allow the College to identify the unique impact of CT session attendance on student success.

Appendix A:
Data Summary Tables for Classroom Tutoring Student Demographics and Course Outcomes

Table 1. Attendance in Classroom Tutoring (CT) Sessions by Age Group

Age Group	Did Not Attend CT Sessions		Did Attend CT Sessions	
	Headcount	Percent	Headcount	Percent
18 - 24	139	80%	59	75%
25 - 29	26	15%	11	14%
30 - 39	5	3%	2	3%
40 - 49	3	2%	5	6%
50 and over	1	1%	2	3%
<i>Total</i>	<i>174</i>	<i>100%</i>	<i>79</i>	<i>100%</i>

Table 2. Attendance in Classroom Tutoring (CT) Sessions by Gender

Gender	Did Not Attend CT Sessions		Did Attend CT Sessions	
	Headcount	Percent	Headcount	Percent
Female	80	46%	43	54%
Male	94	54%	36	46%
<i>Total</i>	<i>174</i>	<i>100%</i>	<i>79</i>	<i>100%</i>

Table 3. Attendance in Classroom Tutoring (CT) Sessions by Ethnicity

Ethnicity	Did Not Attend CT Sessions		Did Attend CT Sessions	
	Headcount	Percent	Headcount	Percent
African American	16	9%	9	11%
American Indian	1	1%	0	0%
Asian	19	11%	10	13%
Filipino	5	3%	1	1%
Latino	71	41%	38	48%
White	50	29%	20	25%
Other	10	6%	1	1%
Unreported	2	1%	0	0%
<i>Total</i>	<i>174</i>	<i>100%</i>	<i>79</i>	<i>100%</i>

Table 4. Attendance in Classroom Tutoring (CT) Sessions by Foster Youth Status

Foster Youth	Did Not Attend CT Sessions		Did Attend CT Sessions	
	Headcount	Percent	Headcount	Percent
Yes	7	4%	1	1%
No	163	94%	74	94%
Unreported	4	2%	4	5%
<i>Total</i>	<i>174</i>	<i>100%</i>	<i>79</i>	<i>100%</i>

Table 5. Attendance in Classroom Tutoring (CT) Sessions by Ethnicity

	African American	Asian	Filipino	Latino	Other*	White
0 sessions	9%	11%	3%	41%	7%	29%
1-2 sessions	9%	6%	0%	66%	0%	20%
3-8 sessions	19%	10%	5%	38%	5%	24%
9+ sessions	9%	26%	0%	30%	0%	35%

Table 6. Enrollment, Retention Rate, and Success Rate by Number of Classroom Tutoring (CT) Sessions Attended

Number of CT Sessions Attended	Enrollments	Retention Counts	Retention Rate	Success Counts	Success Rate
0 sessions	175	151	86%	122	70%
1-2 sessions	35	32	91%	23	66%
3-8 sessions	21	19	90%	16	76%
9+ sessions	23	22	96%	22	96%
<i>Total</i>	<i>254</i>	<i>224</i>	<i>88%</i>	<i>183</i>	<i>72%</i>


Institutional Research

Table 7. Enrollment, Retention Rate, Success Rate, and Average GPA by Number of Classroom Tutoring (CT) Sessions Attended and Course

Course	CT Session Attendance	Enrollment	Retention Counts	Retention Rate	Success Counts	Success Rate	Average GPA
English 43	0 sessions	24	23	96%	20	83%	3.14
	1-2 sessions	3	3	100%	2	67%	1.67
	3-8 sessions	0	0	--	0	--	--
	9+ sessions	0	0	--	0	--	--
English 47A	0 sessions	41	35	85%	31	76%	2.51
	1-2 sessions	5	4	80%	3	60%	2.75
	3-8 sessions	2	2	100%	2	100%	3.00
	9+ sessions	3	3	100%	3	100%	3.33
English 49	0 sessions	23	23	100%	18	78%	2.18
	1-2 sessions	2	2	100%	1	50%	1.50
	3-8 sessions	1	1	100%	1	100%	2.00
	9+ sessions	0	0	--	0	--	--
English 101	0 sessions	37	30	81%	26	70%	2.97
	1-2 sessions	13	11	85%	9	69%	2.91
	3-8 sessions	9	8	89%	7	78%	3.25
	9+ sessions	14	13	93%	13	93%	4.00
Math 92	0 sessions	50	40	80%	27	54%	1.95
	1-2 sessions	12	12	100%	8	67%	2.00
	3-8 sessions	9	8	89%	6	67%	2.25
	9+ sessions	6	6	100%	6	100%	2.83
<i>Total</i>		<i>254</i>	<i>224</i>	<i>88%</i>	<i>183</i>	<i>72%</i>	<i>2.56</i>