

Classroom Tutoring Student Demographics and Outcomes - Spring and Summer 2016 (September 2016)

Executive Summary

As one component of the Proyecto Exito grant evaluation, the present study was conducted as a followup to the report which examined the implementation of the Classroom Tutoring program in its first semester (Fall 2015) at San Diego Mesa College. As in the initial study, the current study examines student access to Classroom Tutoring (CT) by student demographics and compares outcomes of students who attended and did not attend CT sessions.

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 Spring 2016 and Summer 2016 terms. Additionally, Classroom Tutoring attendance data were provided by the CT Coordinator and 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?

A summary of the study's findings is provided on the following pages. Data tables illustrating detailed findings are provided in Appendix A.

Demographics

- There was no significant difference between the ethnicity, gender, or foster youth status of students who attended CT sections versus those who did not in either Spring or Summer 2016 Tables 1, 3-4, 9, 11-12).
- There was, however, a significant difference between the average age of participants versus non-participants in both the Spring and Summer with participants tending to be slightly older than non-participants. In Spring 2016, the average age for participants was 24.3 years compared to 23.0 years for non-participants (Table 2). In Summer 2016, the average age of participants was 26.3 years compared to 23.1 for non-participants (see Table 10 for percentages of students by age group).
- As in Fall 2015, when demographic data were disaggregated by CT session attendance, it became clear that the ethnic composition of the attendance categories varied. In Spring 2016, African American and Latino students were overrepresented in the highest attendance category (9+ sessions), whereas Asian and White students were underrepresented (Table 5). In Summer 2016, however, each ethnic group was proportionally represented in each attendance category.

Retention and Success Rates

- To examine overall student outcomes by CT session attendance, a chi-square analysis was conducted with course retention and success as outcomes of interest. Retention and success rates were significantly higher in Spring 2016 for students who attended CT sessions (Table 6). In Summer 2016, retention and success rates were both somewhat higher for students who attended CT sessions than for non-participating students, and success rates were significantly higher (Table 14) for students who attended CT sessions.
- In general, retention and success rates increased with attendance in more CT sessions in both Spring 2016 and Summer 2016. In the Spring, 95% of students who attended 9 or more CT sessions were retained and 74% were successful compared to 90% and 66%, respectively, for



students who attended 1-2 sessions. This differences were even larger during the Summer 2016 term.

Course Performance

- Small sample sizes made it difficult to draw conclusions about the relationship between ethnicity, retention, and success at the course level. In most courses, students who attended CT sessions performed better than their peers of the same ethnicity who did not attend CT sessions.
- In Spring 2016, White and Latino students who attended CT sessions in English and Math, had higher retention and success rates than their non-participating peers (Table 8). This trend held true in Summer 2016 when all CT sections were Math 096 (Table 15).
- The course grades of students who participated in CT sessions varied by semester and course.
 - o In Spring 2016, students who attended 3 or more CT sessions had a higher average course GPA than those who attended two or fewer (Table 6). By course, however, the course performance varied (Table 7).
 - o In Summer 2016, there was a marked difference between the average GPA of students who did not attend any CT sessions and those who did, but there was little difference between the GPA of students in each of the other attendance categories (i.e., 1-2 sessions, 3-8 sessions, and 9+ sessions).

Conclusion and Recommendations

Based on the results of the present study, across all courses, the students with the most positive outcomes were those who attended 3 or more CT sessions. The same level of achievement was not typically shown for students who attended only one or two CT sessions but these students still tended to perform better than those who did not attend any sessions.

As in the previous report sharing the findings from Fall 2015, the findings of the current study suggest that students may need to participate in classroom tutoring regularly to maximize the academic benefits of participation. Thus, it would be advantageous to encourage students to attend as many sessions as possible throughout the semester. Given the improved performance of students who regularly participated in CT sessions, it is important to note that with the exception of age, access to CT sessions appears to be equitable across 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. Spring 2016 Attendance in Classroom Tutoring (CT) Sessions by Ethnicity

Ethnicity	Did Not Attend	d CT Sessions	Did Attend C	CT Sessions
Ethnicity	Number	Percent	Number	Percent
African American	30	8%	27	13%
American Indian	*	1%	*	0%
Asian	31	9%	27	13%
Filipino	13	4%	*	2%
Latino	148	41%	77	38%
Other	20	5%	*	4%
Pacific Islander	*	0%	*	0%
Unreported	*	2%	*	2%
White	114	31%	54	26%
Total	364	100%	204	100%

Table 2. Spring 2016 Attendance in Classroom Tutoring (CT) Sessions by Age Group

Ago Croup	Did Not Attend	d CT Sessions	Did Attend CT Sessions		
Age Group	Number	Percent	Number	Percent	
Under 18	*	1%	*	2%	
18 - 24	282	77%	129	63%	
25 - 29	42	12%	34	17%	
30 - 39	22	6%	28	14%	
40 - 49	12	3%	*	3%	
50 and >	*	1%	*	1%	
Total	364	100%	204	100%	

Table 3. Spring 2016 Attendance in Classroom Tutoring (CT) Sessions by Gender

Gender	Did Not Attend	CT Sessions	Did Attend CT Sessions		
Gender	Number	Percent	Number	Percent	
Female	178	49%	112	55%	
Male	186	51%	92	45%	
Total	364	100%	204	100%	



Table 4. Spring 2016 Attendance in Classroom Tutoring (CT) Sessions by Foster Youth Status

Foster Youth	Did Not Attend	CT Sessions	Did Attend CT Sessions		
Fosier routii	Number	Percent	Number	Percent	
No	346	95%	187	92%	
Yes	*	2%	*	4%	
Unreported	11	3%	*	4%	
Total	364	100%	204	100%	

Table 5. Spring 2016 Attendance in Classroom Tutoring (CT) Sessions by Ethnicity

Number of CT Sessions Attended	African American	Asian	Filipino	Latino	Other*	White
0 sessions	8%	8%	4%	41%	8%	32%
1-2 sessions	14%	21%	2%	30%	7%	26%
3-8 sessions	10%	10%	1%	37%	9%	33%
9+ sessions	18%	3%	5%	56%	3%	15%
Total	10%	10%	3%	39%	7%	30%

Table 6. Spring 2016 Enrollment, Retention Rate, and Success Rate by Number of Classroom Tutoring (CT) Sessions Attended

Number of CT Sessions Attended	Enrollment	Retention Count	Retention Rate	Success Count	Success Rate	Average GPA
0 sessions	370	280	76%	179	48%	2.04
1-2 sessions	96	86	90%	63	66%	2.34
3-8 sessions	70	65	93%	53	76%	2.57
9+ sessions	39	37	95%	29	74%	2.43
Total	575	468	81%	324	56%	2.21

*Note: The data in the table above are unduplicated. Students who took more than one course supported by a CT may be represented multiple times and/or in multiple categories above. For example, if a student participated in a CT supported ASTR 101 and ENGL 047A, but did not attend any sessions for either course, the student would be counted twice for attending 0 sessions. If that same student had attended 0 sessions for ASTR 101 and 8 sessions for ENGL04A, the student would be counted once each in the 0 and 3-8 sessions categories.



Institutional Research

Table 7. Spring 2016 Enrollment, Retention Rate, Success Rate, and Average GPA by Number of Classroom Tutoring (CT) Sessions Attended and Course

Course	Number of CT Sessions Attended	Enrollment	Retention Count	Retention Rate	Success Count	Success Rate	Average GPA
	0 sessions	113	77	68%	47	42%	1.84
ASTR101	1-2 sessions	*	*	100%	*	57%	1.71
ASTRIUT	3-8 sessions	*	*	50%	*	50%	4.00
	9+ sessions	*	*	100%	*	100%	3.33
	0 sessions	43	30	70%	18	42%	2.00
ENGL047A	1-2 sessions	38	37	97%	30	79%	2.59
ENGLU4/A	3-8 sessions	31	31	100%	27	87%	3.10
	9+ sessions	*	*	100%	*	100%	4.00
	0 sessions	40	36	90%	22	55%	1.57
ENGL101	1-2 sessions	*	*	100%	*	100%	2.50
ENGLIUI	3-8 sessions	*	*	100%	*	100%	4.00
	9+ sessions	*	*	100%	*	100%	3.00
	0 sessions	14	12	86%	12	86%	3.33
ESOL045	1-2 sessions	*	*	89%	*	67%	2.25
E30L045	3-8 sessions	*	*	100%	*	100%	2.00
	9+ sessions	*	*	100%	*	100%	N/A
	0 sessions	58	47	81%	34	59%	2.36
GEOG101	1-2 sessions	*	*	100%	*	75%	2.75
GEOGIOI	3-8 sessions	11	11	100%	*	82%	2.55
	9+ sessions	*	*	100%	*	100%	4.00
	0 sessions	43	38	88%	25	58%	2.03
MATH092	1-2 sessions	10	10	100%	*	70%	2.40
IVIA I HU92	3-8 sessions	11	*	82%	*	64%	2.11
	9+ sessions	11	11	100%	*	73%	2.09
	0 sessions	59	40	68%	21	36%	1.60
MATH096	1-2 sessions	20	12	60%	*	30%	1.73
IVIA I HU96	3-8 sessions	13	11	85%	*	54%	1.64
	9+ sessions	19	17	89%	12	63%	2.25
Total		575	468	81%	324	56%	2.21



Table 8. Spring 2016 Enrollment, Retention Rate, Success Rate, and Average GPA by Course, Ethnicity, and Participation in CT Sessions

		D	id Not Attend	CT Sessions	3	Did Attend CT Sessions			
Subject	Ethnicity	Enrollment	Retention Rates	Success Rates	Average GPA	Enrollment	Retention Rates	Success Rates	Average GPA
	African American	*	40%	0%	0.00	*	100%	100%	3.00
	American Indian	*	100%	100%	2.00	0	-	-	-
	Asian	*	60%	20%	1.00	*	100%	100%	3.00
	Filipino	*	33%	33%	2.00	0	-	-	-
ASTR	Latino	44	68%	30%	1.37	*	80%	40%	2.00
	Other	*	67%	33%	1.50	0	-	-	-
	Pacific Islander	0	-	-	-	0	-	-	-
	Unreported	*	100%	100%	3.33	0	-	-	-
	White	44	73%	59%	2.42	*	86%	57%	2.17
	African American	11	91%	55%	1.61	*	83%	50%	1.79
	American Indian	*	0%	0%	N/A	0	-	-	-
	Asian	*	71%	71%	3.00	13	100%	100%	3.31
	Filipino	*	67%	33%	2.00	*	100%	100%	3.00
ENGL	Latino	39	82%	44%	1.52	30	100%	77%	2.63
	Other	*	67%	33%	1.14	*	100%	80%	2.60
	Pacific Islander	0	-	-	1	*	100%	100%	4.00
	Unreported	0	ı	-	ı	*	100%	50%	2.50
	White	19	79%	53%	2.14	19	100%	100%	3.22
	African American	0	-	-	1	*	100%	100%	2.00
	American Indian	0	-	-	-	0	-	-	-
	Asian	*	83%	83%	3.00	*	100%	75%	2.25
	Filipino	0	-	-	-	0	-	-	-
ESOL	Latino	*	100%	100%	3.00	0	-	-	-
	Other	*	100%	100%	4.00	*	0%	0%	
	Pacific Islander	0	-	-	-	0	-	-	-
	Unreported	*	100%	100%	3.00	0	-	-	-
	White	*	80%	80%	3.75	*	100%	0%	N/A



		D	id Not Attend	CT Sessions	3	D	id Attend CT	Sessions	
Subject	Ethnicity	Enrollment	Retention Rates	Success Rates	Average GPA	Enrollment	Retention Rates	Success Rates	Average GPA
	African American	*	50%	50%	2.50	*	100%	100%	4.00
	American Indian	0	ı	-	ı	0	-	-	-
	Asian	*	75%	50%	2.33	*	100%	67%	2.33
	Filipino	*	80%	80%	3.00	*	100%	0%	1.00
GEOG	Latino	25	84%	60%	2.19	*	100%	50%	2.00
	Other	*	100%	67%	2.33	0	-	-	-
	Pacific Islander	0	-	-	-	0	-	-	-
	Unreported	*	100%	0%	1.00	*	100%	100%	2.00
	White	14	79%	57%	2.73	13	100%	92%	2.92
	African American	10	80%	30%	1.03	17	71%	35%	1.72
	American Indian	0	-	-	ı	0	-	-	-
	Asian	*	100%	67%	1.98	*	67%	33%	1.78
	Filipino	*	100%	50%	1.56	*	50%	0%	0.00
MATH	Latino	39	69%	33%	1.50	42	86%	60%	2.02
	Other	*	86%	57%	1.96	*	100%	33%	1.54
	Pacific Islander	0	-	-	-	0	-	-	-
	Unreported	0	-	-	-	*	100%	50%	1.50
	White	34	74%	53%	2.14	16	94%	88%	2.74
Total		366	76%	48%	2.03	209	91%	70%	2.43



Table 9. Summer 2016 Attendance in Classroom Tutoring (CT) Sessions by Ethnicity

Ethnicity	Did Not Attend	I CT Sessions	Did Attend CT Session		
Ethilotty	Number	Percent	Number	Percent	
African American	*	11%	*	9%	
Asian	*	9%	*	10%	
Filipino	*	5%	0	-	
Latino	21	38%	31	40%	
Other	*	7%	*	4%	
White	16	29%	29	37%	
Total	55	100%	78	100%	

Table 10. Summer 2016 Attendance in Classroom Tutoring (CT) Sessions by Age Group

Ago Croup	Did Not Attend	d CT Sessions	Did Attend CT Session		
Age Group	Number	Percent	Number	Percent	
18 - 24	40	73%	41	53%	
25 - 29	*	16%	21	27%	
30 - 39	*	9%	12	15%	
40 - 49	*	2%	*	4%	
50 and >	0	-	*	1%	
Total	55	100%	78	100%	

Table 11. Summer 2016 Attendance in Classroom Tutoring (CT) Sessions by Gender

Gender	Did Not Attend	I CT Sessions	Did Attend CT Session		
Gender	Number	Percent	Number	Percent	
Female	26	47%	40	51%	
Male	29	53%	38	49%	
Total	55	100%	78	100%	

Table 12. Summer 2016 Attendance in Classroom Tutoring (CT) Sessions by Foster Youth Status

Foster Youth	Did Not Attend	d CT Sessions	Did Attend CT Session		
Poster routil	Number	Percent	Number	Percent	
No	53	96%	70	90%	
Yes	*	2%	*	9%	
Unreported	*	2%	*	1%	
Total	55		78	100%	



Table 13. Summer 2016 Attendance in Classroom Tutoring (CT) Sessions by Ethnicity

Number of CT Sessions Attended	African American	Asian	Filipino	Latino	Other	White
0 sessions	11%	9%	5%	38%	7%	29%
1-2 sessions	9%	12%	0%	41%	3%	35%
3-8 sessions	14%	10%	0%	38%	0%	38%
9+ sessions	4%	9%	0%	39%	9%	39%
Total	10%	10%	2%	39%	5%	34%

Table 14. Summer 2016 Enrollment, Retention Rate, and Success Rate by Number of Classroom Tutoring (CT) Sessions Attended

Number of CT Sessions Attended	Enrollment	Retention Counts	Retention Rate	Success Count	Success Rate	Average GPA
0 sessions	55	44	80%	34	62%	2.44
1-2 sessions	34	28	82%	24	71%	2.86
3-8 sessions	21	20	95%	18	86%	3.00
9+ sessions	23	22	96%	21	91%	2.81
Total	133	114	86%	97	73%	2.71

Table 15. Summer 2016 Enrollment, Retention Rate, Success Rate, and Average GPA by Ethnicity and Participation in CT Sessions

Ethnicity	Did Not Attend CT Sessions				Did Attend CT Sessions			
	Enrollment	Retention Rates	Success Rates	Average GPA	Enrollment	Retention Rates	Success Rates	Average GPA
African American	*	67%	50%	2.25	*	100%	100%	3.00
Asian	*	100%	80%	2.50	*	88%	75%	2.71
Filipino	*	33%	33%	2.00	0	-	-	-
Latino	21	76%	57%	2.44	31	77%	68%	2.50
Other	*	100%	50%	1.75	*	100%	100%	3.00
White	16	88%	75%	2.71	29	100%	90%	3.17
Total	55	90%	62%	2.44	78	90%	81%	2.88