

### **Institutional Research**

# Mathletics Course Outcomes Fall 2017 (June 2018)

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# **Background**

The following study was conducted to compare Fall 2017 Math course outcomes of students who registered and attended Summer 2017 Mathletics event, students who signed up for the event only and did not attend, and students who were not associated with Mathletics in Summer 2017.

A total of 50 students signed up for Summer 2017 Mathletics, but only 21 students attended Mathletics, and 29 students did not attend. Among the 21 Mathletics attendees, two students did not take any math course, and four students either did not enroll at Mesa College in Fall 2017 or misreported their CSIDs.

### Methodology

#### Head Count

Headcount is the number of unduplicated students who enrolled in Fall 2017 term.

#### Enrollment, Retention Rate, and Success Rate

Enrollment is the number of duplicated students enrolled in courses during each term. Retention counts include students who remain in a class after census and receive a final grade other than W. Retention counts are divided by the total enrollments to obtain the retention rate. Success counts consist of the number of students who complete the course with a passing grade (A, B, C, or P). Success rate is calculated by dividing the success counts by the total valid enrollment.

#### Mesa GPA, SDCCD Tern GPA, SDCCD Cum GPA

Mesa Term GPA accounts for total grade points earned at Mesa in Fall 2017 divided by the number of units attempted within the course. SDCCD Term GPA may include grades students received at City or Miramar in Fall 2017. SDCCD Cum GPA averages all current and historic grades students have received at the SDCCD.

### **Key Findings and Limitations**

- More female students signed up for Mathletics and attended Mathletics than male students.
   (Figure 1.)
- The non-attendance rate of students signing up for Mathletics and not attending the event was highest among African American and Latino students compared to those who attended Mathletics or were not associated with the event. (Figure 2.)
- Students aged between 18-24 comprise the majority of the Mathletics attendees. The nonattendance rate after signing up for Mathletics was higher among students aged between 25-29. (Figure 3.)
- More Mathletics attendees had their educational objectives of obtaining Associate Degree or Career Vocational Training compared to attendees or those not associated with the event. A large portion of Mathletics attendees were undecided on their educational goals, compared to sign-up only students or Non-Mathletics students. (Figure 5.)



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- Since the number of students who attended or signed up for Summer 2017 Mathletics was very small, please interpret the outcomes with caution. As the Mathletics program expands to have more student participants, the limitation of the analysis shall be mitigated going forward.
- Aggregate Math course outcomes result showed that Mathletics attendees generally had the highest course retention, success rate, average GPAs and term units earned in Fall 2017.
- Students who signed up for Mathletics but did not attend the event had the lowest overall Math course retention, success rate, and average GPAs in Fall 2017 compared to Mathletics attendees and non-Mathletics students.
- The Math course outcomes pattern holds true to overall course outcomes for Mathletics
  attendees, Mathletics sign-up only students, and Non-Mathletics students, with the exception of
  overall course retention rate. Those who signed up for Mathletics but did not attend had slightly
  higher overall course retention rates than students not associated with the event, but lower
  overall course retention rates than Mathletics attendees. (Figure 2.1)

# Demographic Profiles of Students



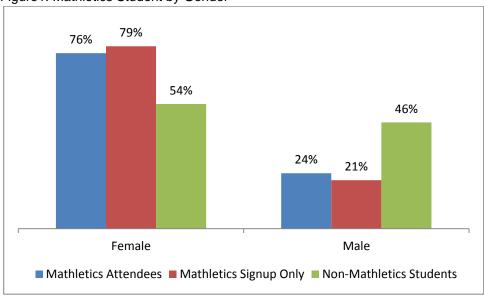
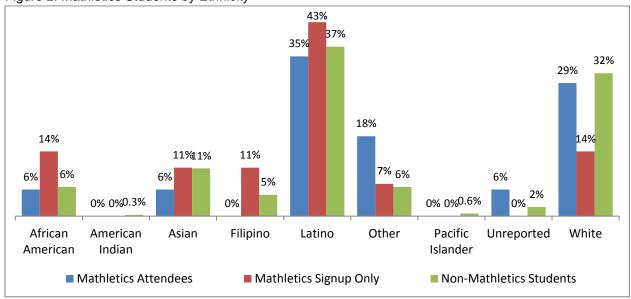




Figure 2. Mathletics Students by Ethnicity



Source: SDCCD Information System

Figure 3. Mathletics Students by Age

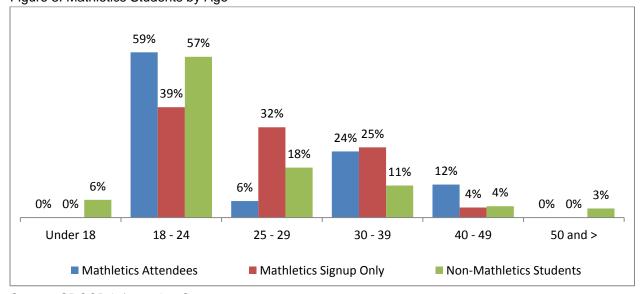
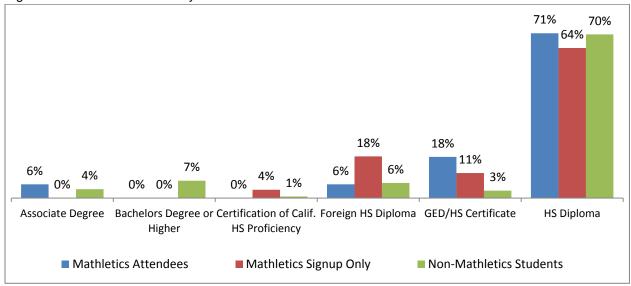


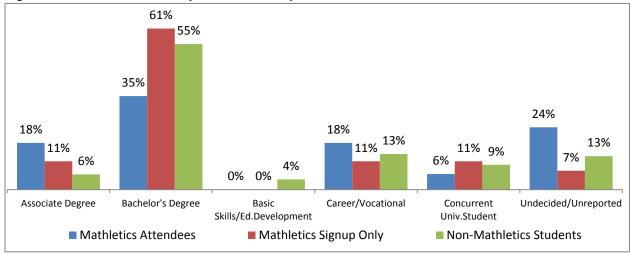


Figure 4. Mathletics Students by Previous Education



Source: SDCCD Information System

Figure 5. Mathletics Students by Educational Objective



Source: SDCCD Information System

*Note.* Three previous education categories- Adult School, Special Admit/K-12, Not a Grad/Not Enrolled in HS were excluded due to no Mathletics attendees falling into the categories.



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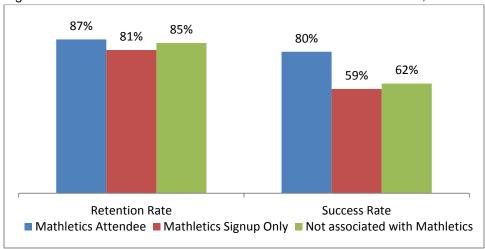
## Math Outcomes

Table 1. Post-Mathletics Math Course Outcomes in Fall 2017

	Math Head Count	Math Enrollment Count	Math Retention Rate	Math Success Rate	Mesa Math Term GPA	SDCCD Term GPA	SDCCD Cum GPA	SDCCD Term Units Earned
Mathletics Attendee	15	15	87%	80%	3.00	2.87	3.18	10
Mathletics Signup Only	26	27	81%	59%	1.96	2.13	2.50	9
Non-Mathletics Students	7,156	7,403	85%	62%	2.38	2.43	2.73	8

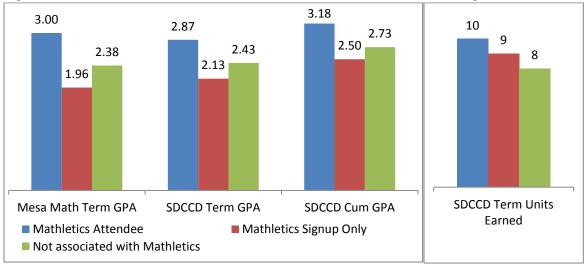
Source: SDCCD Information System

Figure 1.1 Post-Mathletics Overall Math Course Outcomes in Fall 2017, Success and Retention Rate



Source: SDCCD Information System

Figure 1. 2. Post-Mathletics Overall Math Course Outcomes in Fall 2017, Average GPAs, Units Earned





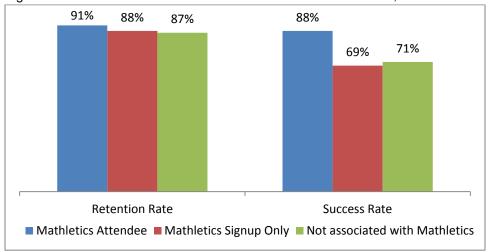
## Overall Course Outcomes

Table 2. Post-Mathletics Overall Course Outcomes in Fall 2017

	Head Count	Enrollment Count	Retention Rate	Success Rate	Mesa Term GPA	SDCCD Term GPA	SDCCD Cum GPA	SDCCD Term Units Earned
Mathletics Attendee	17	58	91%	88%	3.01	2.96	3.13	12
Mathletics Signup Only	28	90	88%	69%	2.25	2.12	2.51	9
Non-Mathletics Students	23,491	57,414	87%	71%	2.71	2.55	2.77	8

Source: SDCCD Information System

Figure 2.1. Post-Mathletics Overall Course Outcomes in Fall 2017, Success and Retention Rate



Source: SDCCD Information System

Figure 2.2. Post-Mathletics Overall Course Outcomes in Fall 2017, GPAs and Term Units Earned

