

Palisades Charter High School

2017 Freshman Math Placement Data Report

(Prepared by Libby Butler – Freshman Math Placement Coordinator)

OVERVIEW:

This report includes data for all freshman who completed a math class in the 2017 fall semester (N=779). Analysis includes breakdowns for placements based on the Placement Criteria approved by the Board of Trustees 3/29/2016. Interpretations of the data and recommendations for future placements are provided.

Counselors are mostly consistently with placing students according to placement criteria results, with 99% of students scheduled in the recommended course or lower (some parents request lower). Students placed higher were either enrolled in an Honors course without meeting the honors criteria (4 students) or were placed into the Algebra 1A CL class instead of Algebra A (4 students). All of the students who were placed higher earned grades of “C” or better in the Fall Semester.

The Math Placement Test was used to place 92.7% of the freshman students prior to the start of the school year, compared to 90.7% in 2016. All but 3.7% of students at least had the Checkpoint test to confirm placement, an assessment analyzed only to determine gross misplacements.

FRESHMAN MATH COURSE ENROLLMENT FOR THE 2016 FALL SEMESTER:

COURSE	2017	2016
Algebra 1A1	0.9%	NA
Algebra A	12.6%	16.7%
Algebra 1A CL	1.3%	NA
Algebra 1A	33.8%	31.3%
Algebra 1B	4.6%	12.2%
Geometry A	21.4%	17.5%
Geometry B	0.1%	NA
Honors Geometry A	3.2%	0.9%
Algebra 2A	13.6%	12.6%
Honors Algebra 2A	8.3%	8.2%
Math Analysis (Honors included)	0.1%	0.2%

Interpretation and Recommendations:

- *The percent of students placed based only on middle school records is almost double from 1.9% in 2016 to 3.7% in 2017.*
 - **Recommendation:** *Administer the placement test upon registration for students who enroll after the checkpoint.*
- *The percent of incoming freshman enrolled in an intervention version of the grade level course was reduced from 16.7%. to 13.5%.*
- *The percent of incoming freshman enrolled in Algebra 1B reduced from 12.2% to 4.6%, with 2.5% of the difference enrolling in Algebra 1A instead.*
- *The percentage of incoming freshman placing into Honors Geometry rose from 0.9% to 3.2%.*

FALL SEMESTER MATH SUCCESS FOR FRESHMAN PLACED ACCORDING TO PLACEMENT CRITERIA:

Course	2017 Earned a "C" or Better	2016 Earned a "C" or Better
Algebra 1A1	100%	NA
Algebra A	65.3%	51.5%
Algebra 1A CL	100%	NA
Algebra 1A	81.4%	77.4%
Algebra 1B	91.4%	90.7%
Geometry A	98.2%	92.6%
Geometry B	100%	NA
Algebra 2A	97.2%	98.9%
Honors Geometry	96%	85.7%
Honors Algebra 2	100%	98.4%

Interpretation and Recommendations:

- ❖ Algebra 1A are having very high levels of success, an indication of overall readiness for advanced courses aligned well with the placement criteria.
- ❖ The percent of students succeeding in Algebra 1A is moderately high and slightly higher than 2016, an indication that readiness for high school Algebra 1 is aligned well with the placement criteria.
- ❖ The number of students not succeeding despite enrollment in Algebra A as an intervention reduced significantly from 48.5% to only 34.7%.
- ❖ The percent of freshman who earned passing grades in the fall semester rose for almost all math courses at the same time that more students were placed higher.

OVERALL PLACEMENT DATA:

- 90.6% complete data for 8th grade math course
- 99.7% complete data for previous school

Placement	Percent of Total Placements	Revere (N=593)	Non-Revere (N=149)
Algebra ABC	12.1%	11.3%	13.4%
Algebra 1A	34.3%	30.2%	46.3%
❖ From Math 8		68.5%	60.9%
❖ From Algebra 1		19.9%	42.4%
❖ From Geometry or Higher		1.3%	41.7%
Algebra 1B	5.2%	4.0%	10.1%
❖ From Algebra 1		6.6%	9.1%
❖ From Geometry or Higher		1.3%	8.3%
Tested out of Algebra 1AB	48.4%	53.1%	30.2%
• Geometry A		(64.9% from Algebra 1)	(37.9% from Algebra 1)
• Honors Geometry A		(8.5% from Algebra 1)	(6.1% from Algebra 1)
• Algebra 2A		(49.1% from Geometry)	(27.3% from Geometry)
• Honors Algebra 2A		(47.2% from Geometry)	(18.2% from Geometry)

Interpretation and Recommendations:

- Revere students appear to be placing into higher level courses at significantly higher rates, indicating there is implicit bias in the design of the placement criteria in favor of students entering from Revere.
 - **Recommendation:** Consider including criteria other than test scores to determine placement for students coming from schools other than Revere.

- The percent of students from Revere who tested into Algebra ABC instead of Algebra 1A from Math 8 decreased from 39.7% in 2016 to 31.5% in 2017.
 - **Recommendation:** Share this information with the math department and administration at Revere.
- The percent of students from Revere required to repeat Algebra 1A or 1B decreased from 28% in 2016 to 16.2% in 2017. Of students at Revere who successfully completed Algebra 1 in 8th grade, 26.5% were required to repeat all or part of Algebra 1, compared with 46% in 2016. Only 2.5% of students who successfully completed Geometry in 8th grade at Revere were required to repeat all or part of Algebra 1.
 - **Recommendation:** Share this information with the math department and administration at Revere. This improvement is in conjunction with a slight downward trend in 8th grade math course placement compared to 2016, from 30.5% to 33.7% in Math 8, 37.5% to 35.6% in Algebra 1, and 28.7% to 26.8% in Geometry. This is evidence of improved results from improved placement of students, away from acceleration too soon.

PLACEMENTS BY GENDER:

Course	Female	Male
Algebra ABC	12.9%	11.3%
Algebra 1A	34.6%	33.9%
Algebra 1B	5.7%	4.7%
Tested out of Algebra 1AB	48.3%	50.1%
❖ Honors	(14%)	(12.9%)

Interpretation and Recommendations:

- ❖ There are no large significant differences for placements between males and females, with less of a gender discrepancy for placement in Algebra ABC compared to 2016.

PLACEMENTS BY ETHNICITY:

Breakdown of Placements Out of Total in Each Ethnic Group

Course	Asian (N=53)	Hispanic (N=113)	Black (N=96)	White (N=476)
Algebra ABC	1.9%	24.8%	31.3%	6.7%
Algebra 1A	17.0%	53.1%	50.0%	29.0%
Algebra 1B	5.7%	3.5%	6.3%	5.0%
Tested out of Algebra 1AB	75.5%	18.6%	12.5%	59.2%
❖ From Retest or SBAC	(13.2%)	(1.8%)	(0.0%)	(7.8%)
❖ Honors	(26.4%)	(1.8%)	(3.1%)	(16.4%)

Placements Based on Previous Course Completion

- ❖ Available data for course completion is not entirely complete for all students, noted in the N values for this analysis

Course	Asian (N=50)	Hispanic (N=109)	Black (N=82)	White (N=457)
Math 8→Algebra ABC	(N=4) 25%	(N=74) 37.8%	(N=59) 50.8%	(N=123) 26.0%
Algebra 1 → Algebra 1A or 1B	(N=18) 27.8%	(N=30) 46.7%	(N=20) 70.0%	(N=207) 27.1%
Geometry or Higher → Algebra 1A or 1B	(N=28) 3.6%	(N=5) 20.0%	(N=3) 100%	(N=67) 7.5%
Algebra 1 or Higher→Next Class	(N=46) 87.0%	(N=35) 60%	(N=23) 52.2%	(N=335) 84.2%

Interpretation and Recommendations:

- ❖ There are large significant differences for placements between ethnic groups.
 - **Recommendation:** Review the placement criteria with the intent to reduce implicit bias between ethnic groups.

10TH GRADE ALGEBRA 2:

These students completed Geometry in 9th grade. Data for most of these students was analyzed to check for any meaningful trends. Only 7 of 84 students earned grades lower than a “C” in the Fall 2017 semester so the analysis is only descriptive.

- ❖ Students who earned low grades had similar records in 8th grade as students who earned grades of “B” or “C” for Fall 2017. Records reviewed included math course grades in 8th grade and 8th grade SBAC performance. This is an indication that these measures would not be reliable for placement in Geometry in 9th grade ensuring success in Algebra 2 a year later.
- ❖ There were 3 students who were placed into Geometry in 9th grade in 2016 who did not demonstrate sufficient Algebra 1 proficiency for this placement. For these three students in the Fall 2017 semester of Algebra 2, one earned a “B”, one earned a “C”, and one earned a “D”. These three students likely would have benefited from repeating Algebra 1 in 9th grade instead of circumventing the placement process for a higher placement in 2016.

OVERALL RECOMMENDATIONS FOR CHANGES TO THE MATH PLACEMENT POLICY:

1. Recommendations throughout this report can be implemented through changes in the use of the same multiple measures available without necessitating formal changes in the Math Placement Policy.
2. Because the SBAC does not assess the same content as the prerequisites for Geometry or higher (most Algebra 1 content is not assessed in the 8th grade test), and data confirming a low correlation between SBAC achievement and demonstration of Algebra 1 content knowledge on the Math Placement Test, replace the use of the SBAC for placement into honors math classes with an opportunity to retest, possibly with a different exam that is better aligned with the prerequisites for higher level math courses.