College Preparatory Mathematics (CPM) – Integrated Math Program

Student Performance Data
Program Change

Traditional Sequence to Integrated Sequence

Former Program
- Algebra 1
- Grade 8 Adv. Algebra 1
- Geometry
- Honors Geometry
- Algebra 2
- Honors Algebra 2
- Pre-Calculus
- AP Calculus

Current Program
- Integrated Math 1
- Grade 8 Adv. Integrated Math 1
- Integrated Math 2
- Honors Integrated Math 2
- Integrated Math 3
- Honors Integrated Math 3
- Pre-Calculus
- AP Calculus
Positive Correlations from Scientific, Research-based Studies

<table>
<thead>
<tr>
<th>Study</th>
<th>Year</th>
<th>Students</th>
<th>Achievement Trend</th>
</tr>
</thead>
<tbody>
<tr>
<td>McCaffrey et al.</td>
<td>2001</td>
<td>5,500</td>
<td>Positive Compared to Traditional</td>
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<tr>
<td>Schoen &amp; Hirsh</td>
<td>2003</td>
<td>1,050</td>
<td>Significantly Higher</td>
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<tr>
<td>Chavez et al.</td>
<td>2015</td>
<td>2,200</td>
<td>Significantly Higher</td>
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<tr>
<td>Tarr et al.</td>
<td>2013</td>
<td>3,258</td>
<td>Significantly Higher</td>
</tr>
<tr>
<td>Grouws et al.</td>
<td>2013</td>
<td>2,161</td>
<td>Significantly Higher</td>
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Positive Correlations from California’s High Schools

For students (n=282,130) who used CPM for 3 years (2015 to 2017), the average increase in scaled score growth was 8.2 points compared 4.7 for all CA students.

Students at Coronado High School (A+ District, 5% FRL) increased proficiency (standards met and exceeded) from 50% to 60% over three years.
Student Achievement Data

- Current Student Grades
- Spring 2018 PSAT 8/9 Math Scores
- End of Year NWEA Math Scores
60% of students enrolled in College Preparatory Math (n=641) are currently earning an A or B.

Note: These in-process grades for Marking Period 4 (MS) and Trimester 3 (HS) contain 467 missing, 139 late, and 73 incomplete assignments. Final grades are expected to be much higher.

Based on our student survey, 76% of students self report they are currently earning and A or B.

Based on a review of high school grades from last year (Algebra 1) and this year (CPM 1), there was no statistically significant difference in grades for Trimester 1.
Middle school Advanced Math CPM students (n=243) showed an average increase in RIT score (Fall 2017 to Spring 2018) of 3.93, compared to their previous growth (Fall 2016 to Spring 2017) of 2.95.

Typical growth for one school year, at those RIT levels, would be 1.5 to 2.0 points.

NWEA data was not available for Grade 9 CPM students - NWEA is not currently part of the high school assessment plan.
Grade 8 Advanced Math CPM students (n=207) averaged 525 on the Spring 2018 PSAT 8/9, compared to 473 for all 8th Grade students (n=643).

All but 6 of our Advanced Math students attained the College and Career Readiness Cut Score of 430.

Spring 2017 PSAT 8/9 scores were not available for comparison as students took the assessment in the Fall of 2016.
CPM Grade 9 students took the PSAT 8/9 as part of the State of Michigan’s M-STEP assessment in April 2018. Results are expected to be released to districts at the end of June/early July.

The PSAT 8/9 College and Career Readiness Cut Score for Grade 9 is 450.