Saratoga School District
Community Math Study Group
Board Study Session
January 18, 2018

Elevating Achievement Through Innovation
Desired Outcome

The Saratoga Board of Trustees will understand the progress and current status of the Community Math Study Group.
Presentation Objectives

1. Overview of data we’ve collected
2. Summary of SUSD’s pathways and placement process
3. Benchmarking with other districts
4. Recommendations under consideration
5. Board discussion and guidance
Data We’ve Collected and Reviewed

- Parent forum
- Parent surveys
- Teacher surveys
- Student surveys
- RMS and SHS data
- Other districts’ pathways and placement
SUSD Community Math Study Group
Community Math Study
Group Members

Nicole Fleck RMS Math Teacher
Elisa Gove RMS Guidance Counselor
Snehali Marimuthu RMS Math Teacher
Rhonda McEntee RMS Math Teacher
Barbara Neal RMS Principal
Rebecca Poon District Math Teacher on Special Assignment
Cassie Sprenger RMS Special Education Teacher
Julie Scola, SHS Math Teacher
Karen vanPutten Argonaut Principal
Robert Zarea Assistant Superintendent of Educational Services

Kelly Chai Foothill, RMS Parent
Garima Gupta Argonaut, RMS Parent
Hardy Leung Argonaut, RMS Parent
Nimisha Mahuvakar Saratoga, RMS Parent
Allyson Moore Saratoga, RMS, Saratoga HIgh School Parent
Sumangala Prasad Foothill, RMS Parent
Malcolm Stewart Saratoga, RMS Parent
Vidya Vineet Foothill, RMS Parent
Jun Wei Argonaut, Foothill, RMS Parent
Manny Barbara, Consultant and Facilitator (SVEF Interim CEO)
CMSG Timeline

September 11: Superintendent Memo to SUSD Community/ beginning of window to accept applications for Working Group (CMSG WG)

September 22: Close of window for applications for CMSG WG

September 27: CMSG WG members notified of selection

October 5: CMSG WG: Background information about SUSD’s current math pathways; identification of information and data

October 12: CMSG WG: Background info about SUSD’s current placement system (cont.)

October 19: CMSG WG: Background info about SUSD’s current placement system (cont.)

October 23 & 25: Parent Input Forums

November 9: Parent Input Forums data; similar districts’ math pathways and placement systems
CMSG Timeline

November 16: Board Meeting - update to Board of Trustees
November 30: CMSG WG: college admissions, other districts
December 7: CMSG WG: Student and parent survey data

January 10: CMSG WG: RMS and SHS Enrollment and Placement Data
January 11: CMSG WG: RMS and SHS Enrollment and Placement Data
January 18: Board Study Session
January 24: CMSG WG: Teacher survey data
January 25: CMSG WG: Formulate recommendations based on data
January 31: CMSG WG: Formulate recommendations based on data

February 8: Board Meeting (informational presentation)
March 8: Board Meeting (board action)
March 14 (pm) & 15 (am): CMSG Report to the Community
Parent Input
(Forum and Survey)
Parent Input

*Forum:*
• 101 participants from TK-8 (all four SUSD schools and 9-12+ (SHS and alumnae))
• Mandarin translation

*Survey:*
• 329 participants (all four SUSD schools and 9-12+ (SHS and alumnae))
• Mandarin translation
Parent Input

I believe my student(s) is/are currently placed in the middle school math course for which they are best prepared to succeed and in which they are challenged to learn?

184 responses

I believe my child(ren)'s middle school math class(es) is/are preparing them for their academic goals during and after high school.

184 responses
Parent Input

Which should be the most important factor in determining a student's middle school math course?

305 responses
Parent Input: Options for Acceleration

Option(s) that you would have your child(ren) participate in, if our district were to offer these options:

<table>
<thead>
<tr>
<th>Percentage</th>
<th>Option</th>
</tr>
</thead>
<tbody>
<tr>
<td>41%</td>
<td>Abbreviated summer math courses (for example, the first half of CCSS 6 in the summer before 6th grade)</td>
</tr>
<tr>
<td>40%</td>
<td>Compacted math course (for example, one period that covers both CCSS 6 and CCSS 7 in 6th grade)</td>
</tr>
<tr>
<td>36%</td>
<td>Skip a math course based on student’s successful challenge of end-of-course-assessment</td>
</tr>
<tr>
<td>25%</td>
<td>Two math courses in a year (for example, two periods that cover CCSS 6 in semester 1 and two periods that cover CCSS 7 in semester 2)</td>
</tr>
<tr>
<td>16%</td>
<td>No changes are needed to current middle school math pathways</td>
</tr>
</tbody>
</table>
Teacher Input (Surveys)
Teacher Input

Surveys:

• 4th & 5th Grade Teachers (11 teachers)
• 6th - 8th Grade Teachers (7 teachers)
Elementary Teacher Input

Do you feel that your students will be well-prepared for middle school math by the end of 5th grade?

- Yes: 72.7%
- Somewhat: 27.3%

11 responses

Do you feel that your students will be well-prepared for the middle school math placement assessments (MARS and NWEA) by the spring of 5th grade?

- Yes: 63.6%
- Somewhat: 27.3%
- No: 9.1%
- Unsure: 0%

11 responses
RMS Teacher Input

Do you feel that most students enter your course with the requisite skills and well-prepared?

8 responses

- 75% Yes
- 25% Unsure

Do you feel that most students leave your course with mastery of skills and are well-prepared for their next course?

8 responses

- 62.5% Yes
- 37.5% Unsure
RMS Teacher Input

Math Placement Assessments: please rate the degree of usefulness of each assessment in placing students in math classes for which they are well-prepared to be successful.

Which should be the most important factor in determining a student's middle school math course?

8 responses
Student Input (Surveys)
Student Input

Surveys:
• 5th Grade (196 students)
• 6th - 8th Grade (783 students)
5th Grade Students’ Input

Rate how you feel about learning math:
199 responses

- 48.2% I love math!
- 32.2% I somewhat like math.
- 12.1% I dislike math.
- 7.5% I strongly dislike math!

My current math class makes me feel like a smart student.
199 responses

- 73.9% Strongly Agree
- 26.1% Strongly Disagree

- 70% believe that current math class is preparing them to meet goals for middle school, high school, and beyond.
- 22% state that they feel stressed about their current math class.
71% believe that current math class is preparing them to meet goals for middle school, high school, and beyond.
80% feel confident and competent in their math course.
16.5% state that they feel stressed about their current math class.
SUSD Placement & Pathways Data (RMS and SHS)
RMS & SHS Data

Redwood Middle School:
- Course Enrollment
- Movement
- Placement Test Scores
- Course Grades
- Placement test scores and course grades

Saratoga High School:
- Course Enrollment
- Movement
- Course Grades
Summary of SUSD’s Pathways & Placement Process
2017-18 SUSD General Education Common Core State Standards (CCSS) Math Pathways (COLOR CODED)

6th Grade:
- CCSS 6
- CCSS 6/7A
- CCSS 7B/8

7th Grade:
- CCSS 7 (7A & 7B)
- CCSS 7B/8
- CCSS Algebra

8th Grade:
- CCSS 8
- CCSS Algebra
- CCSS Geometry

COLOR KEY:
- Grade Level Pathway
- Compacted Pathway: SKIP .5 year of math content
- Accelerated Pathway: SKIP 1.5 years of math content

Exhibit A
Board Approved
12.15.16
(enhanced 5.24.17)
<table>
<thead>
<tr>
<th>Grade</th>
<th>Grade Level Pathway</th>
<th>Compacted Pathway</th>
<th>Accelerated Pathway</th>
</tr>
</thead>
<tbody>
<tr>
<td>6th</td>
<td>CCSS 6</td>
<td>CCSS 6/7A</td>
<td>CCSS 7B/8 (skip 1 ½ yrs)</td>
</tr>
<tr>
<td>7th</td>
<td>CCSS 7</td>
<td>CCSS 7B/8</td>
<td>CCSS Algebra</td>
</tr>
<tr>
<td>8th</td>
<td>CCSS 8</td>
<td>CCSS Algebra</td>
<td>CCSS Geometry</td>
</tr>
<tr>
<td>9th</td>
<td>Algebra 1</td>
<td>Geometry or Geometry Enriched</td>
<td>Algebra 2 Honors</td>
</tr>
<tr>
<td>10th</td>
<td>Geometry</td>
<td>Algebra 2 or Algebra 2 Honors</td>
<td>Pre-Calculus Honors</td>
</tr>
<tr>
<td>11th</td>
<td>Algebra 2</td>
<td>Pre-Calculus or Pre-Calculus Honors</td>
<td>Calculus AB or BC (AP)</td>
</tr>
<tr>
<td>12th</td>
<td>Statistics in Sports or Pre-Calculus</td>
<td>Calculus or Calculus AB-AP or AP Statistics or Statistics in Sports</td>
<td>Calculus BC or Statistics (AP)</td>
</tr>
<tr>
<td>Features of Pathways and Placement</td>
<td>Saratoga</td>
<td></td>
<td></td>
</tr>
<tr>
<td>-----------------------------------</td>
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<td></td>
<td></td>
</tr>
<tr>
<td>Earliest Acceleration Point</td>
<td>6th Grade</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Highest 8th Grade Course</td>
<td>Geometry [Special Cases: Algebra 2]</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data: Spring</td>
<td>NWEA, MARS, Big Ideas Course Mastery</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Data: Fall</td>
<td>MDTP Course Readiness, SBAC</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Teacher Input</td>
<td>Fall Checkpoint</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Parent Input</td>
<td>Consultation available by request</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
Summary of Other Districts’ Pathways & Placement Processes

[Link to Similar Districts Pathways & Placement]
## Similar Districts: Size, CAASPP (2017)

<table>
<thead>
<tr>
<th>District (# of Middle Schools)</th>
<th>Standard Met or Exceeded 2017</th>
<th>Middle School Standard Met or Exceeded 2017</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saratoga (1)</strong></td>
<td>90.12%</td>
<td>Redwood 91.41%</td>
</tr>
<tr>
<td><strong>Cupertino (7)</strong></td>
<td>86.18%</td>
<td>Cupertino 82.43% Kennedy 92.52% Lawson 91.68% Miller 93.44% Hyde 73.69%</td>
</tr>
<tr>
<td><strong>Los Altos (2)</strong></td>
<td>85.53%</td>
<td>Blach 87.35% Egan</td>
</tr>
<tr>
<td><strong>Menlo Park (1)</strong></td>
<td>80.87%</td>
<td>Hillview 79.87%</td>
</tr>
<tr>
<td><strong>Palo Alto Unified (3)</strong></td>
<td>81.45%</td>
<td>Jordan 82.45% Terman</td>
</tr>
<tr>
<td><strong>Pleasanton Unified (3)</strong></td>
<td>76.91%</td>
<td>Hart 74.34% Pleasanton 75.23% Harvest Park 82.95%</td>
</tr>
</tbody>
</table>
## Similar Districts: Funding, Ethnicity (2016-17)

<table>
<thead>
<tr>
<th>District * Basic Aid</th>
<th>African-American, Hispanic</th>
<th>Asian</th>
<th>White</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Saratoga</strong>*</td>
<td>3.9%</td>
<td>55.7%</td>
<td>29.6%</td>
</tr>
<tr>
<td>Cupertino</td>
<td>5.6%</td>
<td>73.8%</td>
<td>15.3%</td>
</tr>
<tr>
<td>Los Altos*</td>
<td>8.5%</td>
<td>31.9%</td>
<td>47.3%</td>
</tr>
<tr>
<td><strong>Menlo Park</strong>*</td>
<td>16.5%</td>
<td>10.2%</td>
<td>59.6%</td>
</tr>
<tr>
<td>Palo Alto Unified*</td>
<td>14.1%</td>
<td>34.8%</td>
<td>40.2%</td>
</tr>
<tr>
<td>Pleasanton Unified</td>
<td>11.3%</td>
<td>38.5%</td>
<td>42.8%</td>
</tr>
</tbody>
</table>
Cupertino: Summary

<table>
<thead>
<tr>
<th>Features of Pathways and Placement</th>
<th>Cupertino</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earliest Acceleration Point</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Highest 8th Grade Course</td>
<td>Geometry</td>
</tr>
<tr>
<td>Data: Spring</td>
<td>NWEA, MARS</td>
</tr>
<tr>
<td>Data: Fall</td>
<td>District Assessment</td>
</tr>
<tr>
<td>Teacher Input</td>
<td>None</td>
</tr>
<tr>
<td>Parent Input</td>
<td>Appeal Process Only</td>
</tr>
</tbody>
</table>
## Los Altos: Summary

<table>
<thead>
<tr>
<th>Features of Pathways and Placement</th>
<th>Los Altos</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earliest Acceleration Point</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Highest 8th Grade Course</td>
<td>Geometry Honors</td>
</tr>
<tr>
<td>Data: Spring (Placements determined in July)</td>
<td>iReady (Best of Three), SBAC, Math Grade MARS (entering 6th, 7th)</td>
</tr>
<tr>
<td>Data: Fall</td>
<td>iReady, Classroom Assessments</td>
</tr>
<tr>
<td>Teacher Input</td>
<td>Fall Placement Checkpoint</td>
</tr>
<tr>
<td>Parent Input</td>
<td>Placement Recourse Procedure</td>
</tr>
</tbody>
</table>
# Menlo Park: Summary

<table>
<thead>
<tr>
<th>Features of Pathways and Placement</th>
<th>Menlo Park</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earliest Acceleration Point</td>
<td>5th Grade</td>
</tr>
<tr>
<td>Highest 8th Grade Course</td>
<td>Geometry [Special Cases: Algebra 2]</td>
</tr>
<tr>
<td>Data: Spring (Placements determined in August)</td>
<td>SBAC MDTP (entering 6th, 7th, 8th) End-of-Year Math Test (entering 5th, 6th) Math Grades (entering 7th, 8th)</td>
</tr>
<tr>
<td>Data: Fall</td>
<td>Classroom assessments</td>
</tr>
<tr>
<td>Teacher Input</td>
<td>Yes (for entering 5th, 7th, 8th graders)</td>
</tr>
<tr>
<td>Parent Input</td>
<td>Open Access with Guidance from Staff</td>
</tr>
<tr>
<td><strong>Features of Pathways and Placement</strong></td>
<td><strong>Palo Alto Unified</strong></td>
</tr>
<tr>
<td>----------------------------------------</td>
<td>----------------------</td>
</tr>
<tr>
<td>Earliest Acceleration Point</td>
<td>7th Grade [Special Cases: 6th Grade]</td>
</tr>
<tr>
<td>Highest 8th Grade Course</td>
<td>Algebra 1 [Special Cases: Geometry Honors, Algebra 2 &amp; Trigonometry Honors]</td>
</tr>
<tr>
<td>Data: Spring</td>
<td>Rubric (entering 7th) District “Mastery Test” (skipping course)</td>
</tr>
<tr>
<td>Data: Fall</td>
<td>Classroom Assessments</td>
</tr>
<tr>
<td>Teacher Input</td>
<td>Yes</td>
</tr>
<tr>
<td>Parent Input</td>
<td>Yes (for 7th Math 7 or 7A; for 8th Math 8 or Algebra 8)</td>
</tr>
</tbody>
</table>
## Pleasanton Unified: Summary

<table>
<thead>
<tr>
<th>Features of Pathways and Placement</th>
<th>Pleasanton Unified</th>
</tr>
</thead>
<tbody>
<tr>
<td>Earliest Acceleration Point</td>
<td>6th Grade</td>
</tr>
<tr>
<td>Highest 8th Grade Course</td>
<td>Geometry</td>
</tr>
<tr>
<td>Data: Spring (Placements determined in May)</td>
<td>District End-of-Year Math Test (entering 6th)</td>
</tr>
<tr>
<td></td>
<td>Math Grades (entering 7th, 8th)</td>
</tr>
<tr>
<td>Data: Fall</td>
<td>Beginning-of-Year Math Test</td>
</tr>
<tr>
<td>Teacher Input</td>
<td>Yes (entering 7th, 8th)</td>
</tr>
<tr>
<td>Parent Input</td>
<td>Open Access with Guidance from Staff</td>
</tr>
</tbody>
</table>
Issues Under Consideration
Issues Under Consideration

1. Pathways to Geometry by 8th grade
2. Placement:
   – Process
   – Criteria
     • Assessments
     • Qualifying Metrics
How Do We Define Success?

• What are our long term interests defining student success?
  – Deep understanding of mathematics?
  – Grades?
  – High school course accessibility?
  – College?
Future CMSG Meetings

January 18: Board Study Session (6:00 - 8:30 PM)

January 24: Teacher and Parent Survey Discussion

January 25: Formulate recommendations Part I

January 31: Formulate recommendations Part II

February 8: Board Meeting (informational presentation)

March 8: Board Meeting presentation
Board Discussion and Guidance