

Vista

Mathspace Pilot Study Brief

Product Info

Product Name: Mathspace

Product Description: Mathspace is a web-based math program that features student-led and teacher-assigned questions, videos and lessons, a hint button to assist students in solving problems, and an interactive writing feature that enables students to write “on-screen.”

Learning Focus: A supplemental or core curricular adaptive math tool for students in grades 5-12

Teacher Training: Offered via webinar

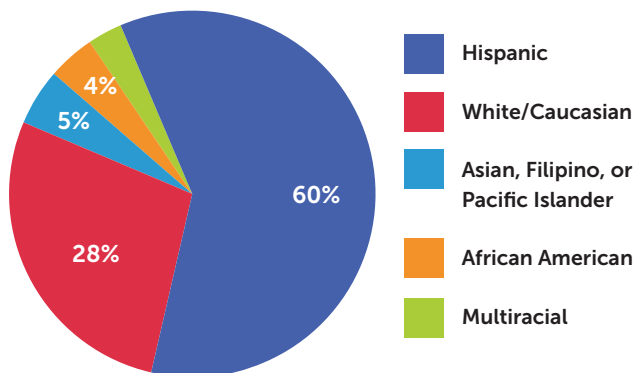
Student Usage Minimum: Teachers assign tasks to students at least three times per week

Device Specifications: Web-based app; requires login and Internet access

Cost: \$20 per student

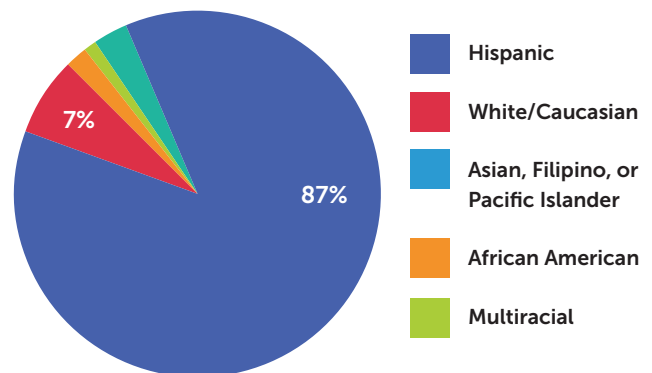
District Context

Vista Unified School District



District demographics: Vista Unified School District (VUSD) is one of San Diego (California) County’s largest school districts, with 29 schools and approximately 1,100 teachers serving more than 22,000 students between pre-K and 12th grades.

Rancho Minerva Middle School

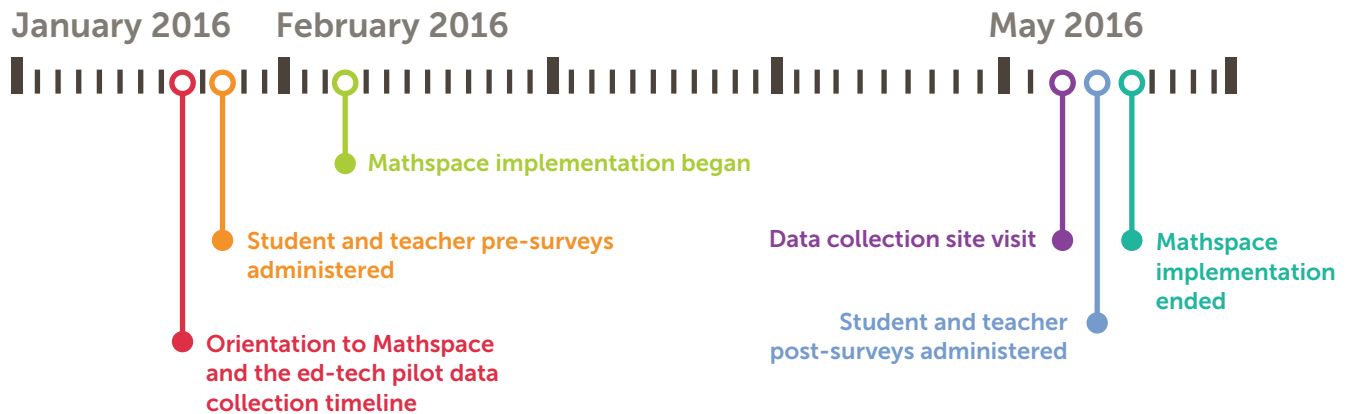


Pilot demographics: Rancho Minerva Middle School (RMMS) is one of five middle schools within VUSD. It serves approximately 900 students in grades 6 through 8.

Number of Students in Pilot	Number of Teachers in Pilot	Eligible for Free or Reduced Lunch	Speak English at Home	Grade Levels in Pilot	K-12 Students with Access to a Device (1:1)	Students with Access to High Speed Broadband at School
264	10	87%	55.2%	6th - 8th	60%	100%

Pilot Implementation

Pilot Goal: RMMS teachers had two main goals for piloting Mathspace: to change students' attitudes towards math, and to give students the opportunity to practice their math skills.



Implementation Model: Implementation varied by teacher subject area expertise (Mathspace was used by math and non-math teachers), and by the amount and type of tasks assigned. In addition, most teachers used Mathspace in an after-school intervention program as opposed to during regular class time.

Data collected: Student pre- and post-surveys, teacher pre- and post-surveys, teacher interviews, school leader interviews, product usage data (provided by Mathspace), and student pre- and post-learning/benchmark assessments.

Findings

Quality of Support: Mathspace offered initial professional development, and then support was available throughout the pilot via online chats.

use ranged from less than one week to more than six weeks. Teachers assigned more tasks in the classroom context than in after school interventions.

Educator engagement: Teachers' self-reported frequency and duration of product

Educator satisfaction: Teachers felt they could have received more comprehensive

professional development in using Mathspace. Inconsistency in teacher use within the district, combined with “pilot fatigue” from participating in multiple pilots, likely added to teachers’ negative perceptions. Student engagement: The majority of students who used the tool in-class reported much longer use (six weeks or more) than students who used it as an intervention (three weeks or less).

Student satisfaction: Most students (77%) found Mathspace easy and enjoyable to use.

Student learning: While there was a statistically significant decrease in students’ self-reported understanding of what they were being taught in math class, there was a statistically significant 17% increase in students’ benchmark test scores.

Outcome

Purchasing Decision: Vista chose not to purchase Mathspace because they wanted to redesign their intervention program. In addition, Mathspace was not easy for non-math teachers to use, and did not engage struggling students as well as other options.

For more information, see:

<http://digitalpromise.org/wp-content/uploads/2016/11/rapid-cycle-pilots-mathsixdistricts.pdf>