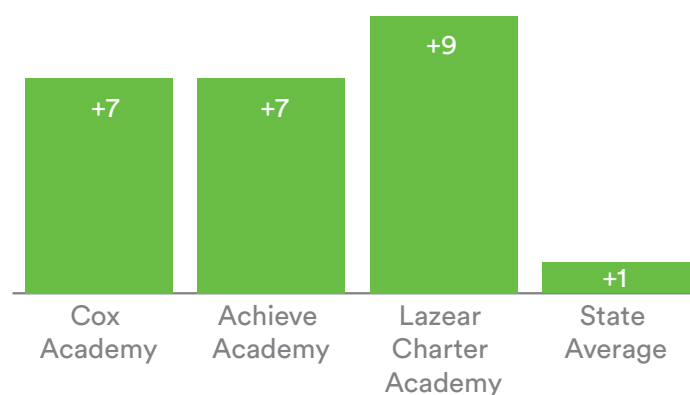


Major Gains After Just One Year of Implementing *Eureka Math*[®]

After just one year of using *Eureka Math*[®], two schools in an Oakland-based public charter network improved their math achievement scores on the statewide test at the end of the 2017–2018 school year by 7 percentage points. A third school, meanwhile, improved by 9 percentage points—and all in a year when the average statewide gain was only 1 percentage point.

THREE NETWORK SCHOOLS SIGNIFICANTLY EXCEED STATE AVERAGE GAIN ON MATH TEST

Increases in the percentage of students meeting or exceeding standards on the Smarter Balanced assessment, 2017-18



The schools are part of Education for Change Public Charter Schools, the largest charter network in Oakland, California, with more than 3,000 students in seven schools. Three elementary schools adopted *Eureka Math* for the 2017–2018 school year, and their students took the state test last spring. A fourth elementary school adopted *Eureka Math* in 2018–2019 and will not have statewide standardized test results until later this year.

BENEFITS OF A RIGOROUS AND COHERENT CURRICULUM

Naomi Perl, the network’s director of mathematics, and several teachers say *Eureka Math* has had a major influence on the improved student performance.

“We weren’t surprised, but we were pleasantly excited about the gains,” Perl says. “Teachers are holding students to higher standards and providing rigorous instruction every day.”

NETWORK PROFILE

7 schools

- 3 elementary
- 2 K–8
- 1 middle
- 1 high

3,088 students

- 88% low-income
- 54% English learners

“Eureka Math creates joy,” she adds, recalling how Grade 5 students are learning to coordinate grids by playing the Battleship game as part of a *Eureka Math* lesson. “Students are so engaged and eager to figure out complex problems.” Perl and others single out the curriculum’s coherence across grades as a major strength. “If you need to remediate, you can just go back to a previous grade for the key content,” Perl says.

Keila Gaeddert, who teaches Grade 3 at Lazear Charter Academy, says she likes “the balance among procedural practice, real-world applications, and concept development. Students can pull from such a large bank of problem-solving strategies.”

Julia Tombs, a Grade 4 teacher at Lazear Charter Academy, welcomes the emphasis on conceptual understanding and problem solving. “There was a lot I didn’t understand myself,” she says. “But having tools like number bonds and tape diagrams has helped me and my students. It’s the difference between understanding concepts and just understanding how to get the right answer.”

Emily Wiberg, who teaches Grade 4 at Achieve Academy, also praises tools such as the bar models, tape diagrams, and number bonds. She says they help students visualize solutions, which has improved their arithmetic skills. “My students used to struggle with subtraction,” she says. “But since I’ve been teaching the *Eureka Math* curriculum with fidelity, the number of students needing extra help has plummeted.”

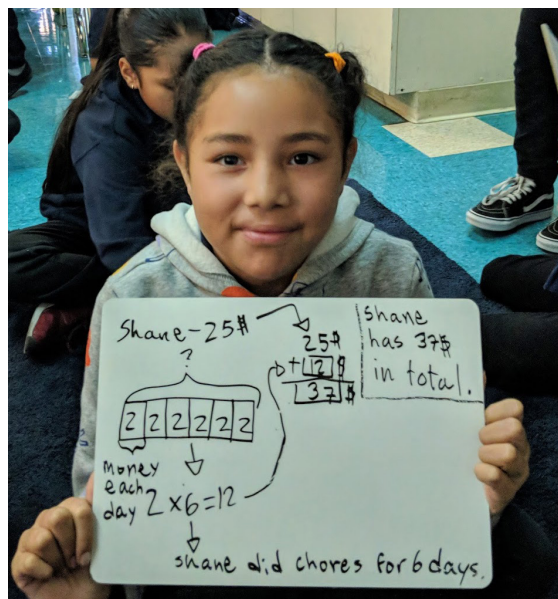
David Norris, principal of Cox Academy, says the feedback from a recent meeting with K–2 teachers demonstrates just how effective *Eureka Math* is. “They shared how much *Eureka Math* has transformed their understanding,” he says, “and how it is really pushing both them and their students to dive into a strong conceptual understanding of math.”

THE POWER OF COLLABORATION

Perl is an especially strong believer in collaboration, not just within her network but with educators from across the country. She frequently reaches out to former colleagues in Washington, DC, and New York City. “So many schools are using *Eureka Math* and *EngageNY Math* [the previous version of *Eureka Math* that Great Minds® developed for New York State] that there are a lot of resources everywhere to help all of us solve everyday challenges.”

Yu-Ting Chen, who teaches Grade 5 at Achieve Academy, says she plans modules with a grade-level partner. They focus their instruction on backward mapping from the Exit Tickets and planning key questions to help introduce students to new modules. “The students take much more ownership when we’re transparent about the end result at the front end,” she says.

The charter school network also provides significant teacher support. Perl and her colleagues say that having dedicated math teachers in Grades 3–5 helps with implementation. Elementary math teachers receive bimonthly professional development at the school level to analyze data and plan ahead for



Julia Tombs’ Grade 4 class, Lazear Charter Academy

upcoming modules. They also meet four times a year for systemwide training. In addition, each school has a math lead who, along with Perl, provides regular coaching and support. And at the leadership level, monthly professional learning communities help principals and assistant principals anticipate upcoming lessons.

A GROWING UNDERSTANDING OF THE CURRICULUM

After a year with *Eureka Math*, teachers are starting to really grasp the curriculum, Perl says. “There is much more recognition of how concepts repeat throughout the year and grades,” she says, adding that these educators have also gained a much better understanding of the choices the *Eureka Math* teacher-writers made in organizing the material.

Norris echoes this point in saying that *Eureka Math* also helps teachers improve their own craft. “This is a teacher development curriculum as much as it is a curriculum for kids,” he says. “There’s so much in there. Our challenge is how to take this and really make it work for kids. What are the right instructional decisions so that our students are successful?”

For their part, teachers say they are better able to customize lessons and differentiate instruction this year. “I have a much better grasp of what I can cut or combine,” Gaeddert says.

“Our conceptual understanding is getting better,” says Chen, citing more time for backward mapping of lesson plans and more cross-grade conversations.

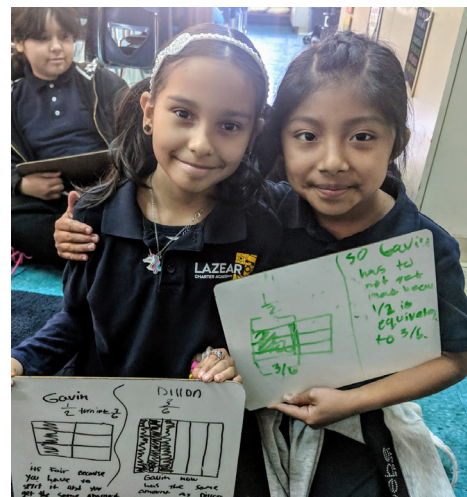
Wiberg says, “The more you teach, the more you see the concepts and methods” reappear in the curriculum. She appreciates the coherence across grades. “Knowing the specific problem-solving techniques and knowing what the curriculum looks like in every year is incredibly important.”

Students are also starting to grasp the methods and strategies in *Eureka Math*. “I’m seeing more discussions and students explaining their answers,” Tombs says. “Now that they’re familiar with strategies like number bonds, they can just dive right into deeper problem solving.”

Gaeddert says her students are pulling from a **toolbox** of strategies, showing their work more, and having deeper conversations about math. “There is so much more discourse, with students adding on to each other. It’s really cool.”

“This is a teacher development curriculum as much as it is a curriculum for kids.”

— David Norris, Principal, Cox Academy



Julia Tombs' Grade 4 class, Lazear Charter Academy