

Folsom-Cordova Unified School District

DISTRICT PROFILE

The Folsom-Cordova Unified School District (FCUSD), just northeast of Sacramento, includes the two cities of Folsom and Rancho Cordova. Each city has a population of over 70,000, making it a large district. It serves over 20,000 students with 20 elementary schools, 4 middle schools, 3 high schools, 4 alternative schools and 1 charter school.

The two communities have active parent groups, service organizations and city councils. Both cities feature numerous local and regional businesses.

Socioeconomically disadvantaged students constitute 11.7% of Folsom's student population, while Rancho Cordova schools have 69%. The English Learner (EL) population in Folsom is 4.4% while Rancho Cordova's is 28%.

Folsom Cordova District Profile

K-12 Urban School District, Sacramento County, CA

Total Enrollment: 20.000

Socio-economically disadvantaged students:

- Folsom 11.7%
- Rancho Cordova 69%

English language learner (EL) students:

- Folsom 4.4%
- Rancho Cordova 28%

THE DISTRICT'S CHALLENGE

As the Common Core State Standards for Mathematics (CCSSM) went into effect in California, there was considerable discussion among FCUSD elementary educators, led by Curtis Wilson, Assistant Superintendent of Elementary Education, about the instructional shifts required by the CCSSM.

Among other changes, the Common Core placed major emphasis on a <u>balance</u> of the development of students' conceptual understanding of mathematics, computation and procedure, and problem solving. Previously, there had been an unbalanced emphasis on computation and procedure.

As a first step, the district mapped its then-existing curriculum to the CCSSM to address the demands of the standards. Using that modified curriculum, District Elementary Math Lead Mary Beth Haness employed district resources such as onsite internal coaching to help teachers embrace the CCSSM's new and more rigorous math practice standards. After two years, however, the realignment of the materials had not translated into the CCSSM-driven teaching practices the district had hoped to see.

¹ Sources: Folsom-Cordova website, https://www.fcusd.org/ and California Department of Education (CADOE) Dataquest website, https://dq.cde.ca.gov/dataquest/

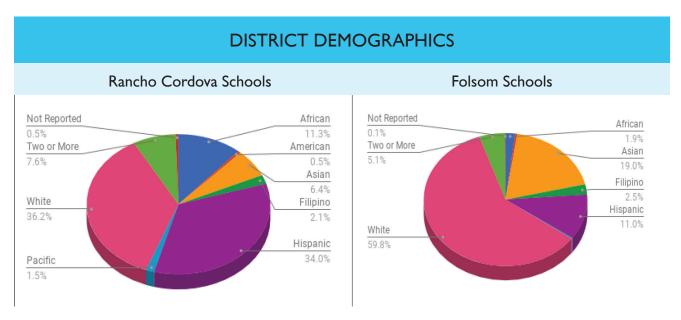


When the district began its search for a CCSSM-aligned elementary math curriculum, District Lead Haness focused on finding a curriculum that would support its teachers in building strong skills around teaching conceptual understanding. The longer-term goal was to help teachers transform their math classrooms into effective learning environments with equal time allocated to each of the three pillars of mathematical proficiency: conceptual understanding, computational procedure, and problem-solving.

FINDING THE RIGHT SOLUTION

The district was looking to build a strong consensus among its teachers in the new program's selection. With a plan to have Chromebooks for all students as part of its 1:1 initiative, FCUSD was on the path to being technology-ready. 1:1 was attained during the 2016-17 school year.

FCUSD piloted Pearson's *enVisionMATH Common Core Realize Edition* ©2015 (enVisionMATH) beginning in January 2014. The pilot group consisted of twenty-four classrooms, grades K-5, evenly represented from Folsom and Rancho Cordova. Based on positive feedback from the 24 piloting teachers, the district determined that *enVisionMATH* was a good overall fit.



envisionMATH was chosen to span a range of student learners and learning (conceptual and cultural) backgrounds.²

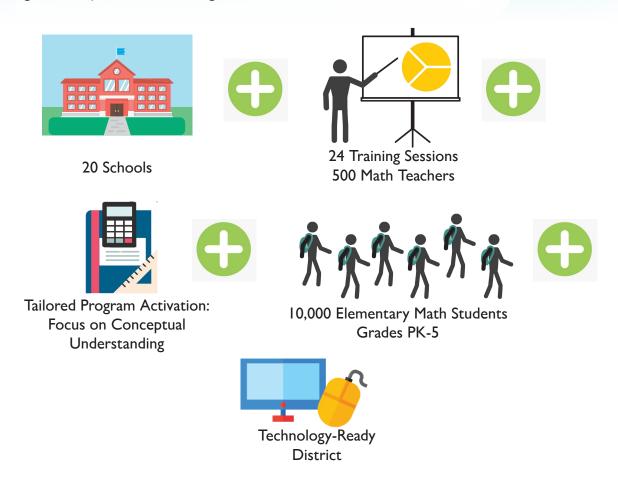
² Source demographic data: CADOE, https://dq.cde.ca.gov/dataquest/



IMPLEMENTATION AT SCALE

enVisionMATH was to be the primary curricular resource, not a supplement, in FCUSD's elementary schools. In the late summer of 2014, Pearson and Folsom-Cordova kicked-off implementation of enVisionMATH with a large-scale program activation training.

Initial training was designed to prepare the district's 500 elementary school teachers for Day I in the classroom using the program. In collaboration with the district, the training was tailored to focus on supporting the teaching and learning of conceptual understanding.



The district supports ongoing implementation of enVisionMATH with a well-rounded internal toolkit that includes:

- Regular classroom observations
- Job embedded assistance for individual teachers as needed
- Monthly professional learning communities facilitated by district coaches where teachers share their knowledge and experience to support one another and improve practice

The goal is for teachers to dedicate 90 minutes every day to math instruction using enVisionMATH.



RESULTS

Perception Survey Results

At the end of each of the first two years of district-wide *enVisionMATH* use (2015 and 2016), District Lead Haness surveyed the district's elementary math teachers. These surveys were part of the district's process for developing a strategic plan focused on further supporting growth in mathematics teaching and learning.

The teachers noted changes in student behavior or engagement that they had observed. These changes track to the CCSSM's Eight Mathematical Practices which identify the skills exhibited by successful math learners (such as persevering, showing work in multiple ways, using appropriate tools, and explaining thinking both orally and in writing).

The teachers also highlighted features of *enVisionMATH* that the students or the teachers themselves found particularly useful, helpful, or fun. A few of these responses are captured in the chart below.

Changes in Student Behavior and Engagement Using enVisionMATH

"Students have a stronger foundation of skills now, and their transition from first grade math to second grade math has been much easier. I think the concept of working through a challenge as opposed to ask your teacher for help as soon as you get frustrated has hit home. I am seeing much more perseverance from the students as they work through the lessons. Also, the students are learning that they have a tool kit of strategies they can pull from when they are solving problems."

"The Interactive Learning went well. I encouraged the students to use math vocabulary within their discussions. As the year went on, I heard a lot more math vocabulary used during this time."

"The students seemed to enjoy math. The activities and the connection to real life was a success."

"Overall, kids were very successful. **Their confidence and ability in explaining how they solved problems has grown tremendously.** The intervention system booklet was helpful in walking the students step by step through a challenging lesson. Third grade liked the performance tasks at the end of each topic. **Love it when kids love to learn.**"

"Students were able to explain, discuss and write about math like never before. The hands on component in every lesson was so valuable."

"Students were much better at explaining their thinking, at using the appropriate academic language, and at demonstrating multiple ways to tackle problems."

"It was SO much better than what we had before. I loved the PBIL [Problem Based Interactive Learning]. My students achieved 90% mastery on the DPA, with an average of 83.3%. They became mathematical thinkers."

This perception survey data demonstrates that FCUSD had achieved with *envisionMATH* what it had set out to do. Where teachers had used the program with fidelity, instructional practices to evolve student conceptual understanding had improved, and as a result, so had student conceptual understanding.



California High-Stakes Testing

California tests students in grades 3-8 and again in grade 11. In a comparison of the California Assessment of Student Performance and Progress (CAASPP) test results for overall math proficiency for FCUSD's 4-6 graders from 2015-2017, the percentage of students meeting or exceeding the "cut score" for math proficiency increased in a number of schools.³

Ten out twenty elementary schools in the district saw significant improvement in student math performance in grades 4-6 during this period. Many of the largest jumps in student math proficiency occurred in Rancho Cordova's elementary schools. Notable positive changes in the percentage of students meeting or exceeding overall state math proficiency standards for individual schools are summarized in the chart below.⁴

"Met or Exceeded" Percentage Gains in Overall Math Proficiency CAASSP Scores (2015-2017)	
Rancho Cordova Schools	
Cordova Gardens Elementary • 4th grade (40.3% growth 2016 to 2017) Navigator Elementary • 4th grade (23.4% growth 2016 to 2017) Peter J. Shields Elementary • 4th grade (21.6% growth 2016 to 2017)	Rancho Cordova Elementary • 5th grade (69.7% growth 2016 to 2017) White Rock Elementary • 4th grade (68.5% growth 2016 to 2017) Williamson Elementary • 5th grade (16.7% growth 2015 to 2017)
Folsom Schools	
Carl Sundahl Elementary • 4th grade (2.5% growth 2016 to 2017) • 5th grade (4.7% growth 2015 to 2017) • 6th grade (8.2% growth 2015 to 2017) Natoma Station Elementary • 5th grade (9.8% growth 2015 to 2017)	Russell Ranch Elementary • 4th grade (11.4% growth 2016 to 2017) • 5th grade (4.3% growth 2015 to 2017) Theodore Judah Elementary • 4th grade (9.9% growth 2016 to 2017)

LOOKING AHEAD

In 2017, FCUSD embarked on a strategically designed four-year plan focused on the progressive strengthening of aspects of mathematics instruction. The plan targets and uses features of *enVisionMATH* to support teachers in growing their own, and their students', capacity across these areas:

- Continued building of conceptual understanding
- Use of formative assessment to support differentiated and small group instruction
- Development of student writing to explain reasoning

With the adoption of its four-year strategic plan for evolving math instruction, FCUSD looks forward to a trajectory of success in elementary mathematics student achievement.