



# Case Study

La Entrada Students Participate in Hands-On STEM in the Classroom and via Distance Learning with STEMscopes

Menlo Park, California

**4-8**  
Grades

**716**  
Students

**0.1%**  
American Indian or Alaska Native

**17%**  
Asian

**1%**  
Black or African American

**1%**  
Filipino

**10%**  
Hispanic or Latino

**0.3%**  
Native Hawaiian or Pacific Islander

**58%**  
White

**12%**  
Two or More Races

**6%**  
Economically Disadvantaged

**3%**  
English Language Learners (ELLs)

**6%**  
Students with Disabilities

# La Entrada Students Participate in Hands-On STEM in the Classroom and via Distance Learning with STEMscopes

## THE CHALLENGES

La Entrada Middle School is one of two schools in the Las Lomas Elementary School District in Menlo Park, Calif. Located near Stanford University, between the major metropolitan areas of San Francisco and San Jose, La Entrada was designated a National Blue Ribbon School in 2014, and in 2017, a California Gold Ribbon School.

In 2019, La Entrada educators set out to find new science materials aligned with the California Next Generation Science Standards (CA NGSS).

“We’re a small school in a small district. We have a strong science department and I had great lessons, but the science textbook I was using was at least 10 years old,” says Joanne Tinkham, a sixth grade science teacher at La Entrada. “We wanted to get NGSS materials for our whole school, so all of our teachers piloted different products. STEMscopes was one of the programs I piloted. Unlike our science textbook, STEMscopes offers paper-free teaching. The STEMscopes content is tighter and better organized, and it gives my students so much more. Another thing that’s exceptional about STEMscopes is the support. The STEMscopes personnel are amazing.”

## THE STEM SOLUTION

- STEMscopes CA NGSS 3D
- STEMscopes Streaming
- STEMscopes Coding

La Entrada Middle School began using STEMscopes CA NGSS 3D schoolwide in grades 4-8 during the 2019-20 school year. In 2020, it made STEMscopes Streaming and STEMscopes Coding available to teachers as well.

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### Implementing a phenomena-based, three dimensional curriculum

STEMscopes CA NGSS 3D is built on the CA NGSS and aligned to the California Science Framework. It is centered on phenomena-based instruction to drive student inquiry and a passion for STEM, while helping students prepare for the California Science Test (CAST). The curriculum, which was adopted by the California State Board of Education in 2018, is also available in Spanish for grades K-12.

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STEMscopes CA NGSS 3D supports student and teacher success through a combination of comprehensive digital STEM curriculum, supplemental print materials, and ready-made exploration kits with embedded professional development. It provides everything teachers need to address the Disciplinary Core Ideas, Crosscutting Concepts, and Science and Engineering Practices that form each standard of the CA NGSS. It includes customizable, coherent, storyline-driven bundles that immerse students in phenomena while linking the three dimensions across lesson modules.

“The NGSS tell us about things like inquiry-based learning, storylines, and Claim-Evidence-Reasoning — and STEMscopes makes it possible to do all of those things. It takes a load off of my mind as a teacher, because I know it works,” says Tinkham. “The first time I taught with a STEMscopes storyline, I could see students’ eyes light up. That’s a beautiful thing.”

### Supporting teachers

In addition to student learning modules, the STEMscopes curriculum includes embedded support for teachers — such as lesson plans, professional development videos, on-demand webinars, and how-to guides — to help them continuously improve their teaching.

“I used the teacher materials a lot when we were getting started with STEMscopes. It’s great to know that support is there for you,” says Tinkham. “Having the ready-made kits is helpful, too. It’s a luxury to not have to go to the store, and it’s easier to set up labs.”



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“Although my students have been learning science remotely for almost a year now, they are completely engaged and their comprehension is good, too. STEMscopes has been excellent for us.”

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“STEMscopes Streaming helps me teach and connect science to the real world,” says Tinkham. “I love the BBC videos, the discussion questions, the phenomena-based storylines — they help students understand why science is important.”

### **Making it easy to code from anywhere**

Tinkham also enjoys using STEMscopes Coding with her sixth graders. With STEMscopes Coding, K-12 teachers can bring coding into every classroom — with no prior coding experience required. Powered by Bitsbox, STEMscopes Coding teaches students how to design and build apps that can be shared on any device. They can code on the website while their apps live in the cloud, so they can code at school, at home, or anywhere else they feel inspired.

“I want students to have a creative outlet and build skills they can use in the future,” Tinkham says. “We used another coding program previously, but it didn’t allow students to save their work. With STEMscopes Coding, they can save their work all year.”

Unlike other coding programs that simulate the process with block-based learning, STEMscopes Coding allows students to type their JavaScript code for a hands-on, personalized experience. They can create their own games, simulations, and storytelling apps with graphics, animation, interactivity, and sound.

STEMscopes Coding also provides embedded support to help educators teach coding with confidence.

“I don’t have a great depth of knowledge in coding” Tinkham reveals. “So STEMscopes Coding is a gamechanger. It’s intuitive and simple to use, and students can save and share their material so easily. My students love STEMscopes Coding. They’re really into their projects. To them, it feels like a game, but it’s so much more than that because of the collaboration and creativity it promotes.”

### **Engaging STEM learners**

“STEMscopes is so multifaceted. It’s visually appealing. Students can turn on the text-to-speech function if they want something read aloud, or get vocabulary support if they need it. All of these things really help my students,” says Tinkham. “With the STEMscopes Intervention and Acceleration resources, I can make the curriculum easier or more challenging in a manageable way. There are so many opportunities; there’s something for everyone.

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