

# San Joaquin County Office of Education

## STEM Professional Development Opportunities for Teachers

### **Addressing CA Computer Science Standards Through Robotics**

*October 9, 2019 | Grades K–12 | \$125 | Register here: <https://conta.cc/2Ni5BSy>.*

The CA computer science standards are a chance for all students to gain computational thinking skills. As our world is becoming increasingly digital, all students should know how to use computers to solve problems logically. One fun way to do this is through robotics. This is a great opportunity to learn and work with robotics at different grade levels and learn how to address the CA computer science standards.

- **NGSS 5E HS Biology Collaborative Planning**

*October 10, 2019 | Grades 9-12 | \$125 | Register here: <https://conta.cc/2IXEikS>.*

*February 26, 2020 | Grades 9-12 | \$125 | Register here: <https://conta.cc/2kHbH3e>.*

- **NGSS 5E HS Physics Collaborative Planning**

*January 28, 2020 | Grades 9-12 | \$125 | Register here: <https://conta.cc/2kQCQAw>.*

- **NGSS 5E K-5 Collaborative Planning**

*January 29, 2020 | Grades K-5 | \$125 | Register here: <https://conta.cc/2mnryUX>.*

- **NGSS 5E Middle School Collaborative Planning**

*January 30, 2020 | Grades 6-8 | \$125 | Register here: <https://conta.cc/2kTrmw9>.*

- **NGSS 5E HS Chemistry Collaborative Planning**

*February 11, 2020 | Grades 9-12 | \$125 | Register here: <https://conta.cc/2kmlM5e>.*

The NGSS curriculum resources are often challenging to navigate and develop into an appropriate scope and sequence for classrooms. Let SJCOE STEM Programs facilitate this process in a collaborative workshop with other area educators. We will explore the NGSS resources and work alongside other grade-like educators to further develop 5E lessons, storylines and units that can be immediately implemented into practice.

### **Formative Scaffolding NGSS Assessment**

*October 22, 2019 | Grades 6-12 | \$125 | Register here: <https://conta.cc/2Z8EBfH>.*

Participants will learn how to add meaningful scaffolds and supports to existing assessments to better prepare students for normative, NGSS, 2 and 3 dimensional learning and performance tasks.



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Questions? Please call, STEM Program at 209-468-4880.  
Or Email Vanessa Reynoso Mercado at [vreynosomercado@sjcoe.net](mailto:vreynosomercado@sjcoe.net).

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### Make and Take Electrophoresis

*November 19, 2019 | Grades 6-8 | \$210 | Register here: <https://conta.cc/2kmme3q>.*

Come and experience how electrophoresis can be used to address CA NGSS Performance Expectations and make a class set of equipment that will allow you to continue this activity in your classroom for years to come! This make and take workshop will begin with participants experiencing how the lesson can unfold based upon viewing an engaging phenomenon. Once observed, participants will model what they think is happening. Over time, they will plan and execute an experiment, develop a scientific explanation that includes claim, evidence and reasoning. Then they will put together their own kit that will serve a class of 35 with students working in pairs. Registration limited to 40 participants.

### Building Toward the CAST (How do you design a 2D and a 3D assessment?)

*February 25, 2020 | Grades 6-12 | \$65 | Register here: <https://conta.cc/2Nj4SAr>.*

Come learn how to best utilize the resources for the California Science Test (CAST) including training, practice tests, rubrics and scoring guides. Participants will also experience performance tasks and collaboratively work toward creating classroom NGSS assessments to better prepare our students and inform instruction. This will be a half-day workshop.

### Tech in Teaching

*February 25, 2020 | Grades 3-12 | \$125 | Register here: <https://conta.cc/2koGl13>.*

Often in Education people think about what technology is, rather than what they need students to be able to do. Tech in Teaching is a training to cover useful technologies for teachers, from media usage to augmented reality.

### Engineering with 3D Printing

*March 21, 2020 | Grades 3-12 | \$125 | Register here: <https://conta.cc/2ZfuwbQ>.*

3D printing is a constantly expanding technology. From prototyping small electronic inventions, to building concrete structures, students can learn and experience engineering using 3D printers in the classroom.



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