

# Better Together: Northern California CASE Regional Gathering

Learn, Share and Connect  
with other Science Educators

Spend the day attending  
workshops, networking,  
and a social happy hour!

Saturday, January 22, 2022  
8:45am – 4:00pm  
San Joaquin COE - FabLab  
Social happy hour  
German Guys  
10438 Waterloo Rd  
Stockton, CA 95215

\$65 members  
\$85 nonmembers

*CASE is committed to creating an event experience where we can gather together in a safe and healthy environment. Note that we will provide the necessary measures to ensure that each participant's well-being is our top priority. Please visit the [CASE website](#) for COVID-19 protocols.*

Register Online  
<https://bit.ly/3cf5p1W>



Stephen  
Callahan

Don't miss  
our opening  
session with  
**Stephen  
Callahan!**



SAN JOAQUIN COUNTY  
OFFICE OF EDUCATION



STEMscopes™

SCAN ME



# SCHEDULE OF EVENTS

Saturday, January 22, 2022 - Northern CA - San Joaquin COE, FabLab

**8:45am - 9:30am**  
**Registration Check-In,**  
**Coffee, Networking**

**9:30am - 11:00am**  
**Common Experience**  
**Data Crashes at the Intersection**  
**of Science and Computer Science**

*Presenter: Stephen Callahan,*  
*SJCOE*

Computers are great with numbers, and when those numbers describe something that has happened, we call it data. We'll look at how we can program a small circuit board called a microbit to collect data from collisions. We'll also use our data to help inform our engineering as we design bumpers to keep drivers safe. No previous coding experience is necessary, our coding will go from zero to 60 and it will be fun the whole way.

**11:15am - 12:30pm**  
**Breakouts**  
**Breakout #1 - Workshop,**  
**grade-band (Details Coming Soon)**  
**STEMscopes Partner Session**

**Breakout #2 - Workshop,**  
**grade-band TK-12**  
**Adding E and T to our STEM**  
**lesson: Data Crash Part 2**

*Presenter: Stephen Callahan,*  
*SJCOE*

Teachers will return to the SJCOE FabLab to engineer a Laser Cut bumper to decrease the force felt in a crash. We'll also learn to program the Microbit to control a RVR robot. Computer Science and Technology used to increase engagement will be a focus of this session.

**Breakout #3 - Workshop,**  
**grade-band, 6-12**  
**Mathematics and Computational**  
**Thinking with HHMI: Authentic**  
**Data and Practices**

*Presenter: Jim Clark and*  
*Samantha Johnson, HHMI/*  
*Arroyo High School*

Continue highlighting the practice of mathematics and computational thinking! See how to authentically integrate this SEP into your classes. We'll utilize BioInteractive resources that allow students to engage in traditional and less traditional ways, including data analysis, infographics and more.

**12:30pm - 1:15pm**  
**Lunch, Networking**

**1:15pm - 2:30pm**  
**Breakouts**  
**Breakout #1 - Workshop,**  
**grade-band, 3-5**  
**Growing The Environmentally**  
**Principled Mindset Through**  
**3D Assessment**

*Presenter: Sherrie Starkie,*  
*San Ramon Valley Unified*  
*School District*

Learn how to weave EPCs into issues that connect with students. Backwards mapping from a summative assessment, participants will use observations and information on weathering and erosion to choose the best location for a future school.

**Breakout #2 - Workshop,**  
**grade-band, TK-12**  
**Action Oriented Learning About**  
**Local Climate Change Phenomena**  
**Through Mapping**

*Presenter: Deirdre Snyder,*  
*Environmental Justice Caucus of*  
*the Oakland Education Association*

Join us to explore how to engage and empower students through mapping local climate change and environmental justice phenomena that have direct impacts on your students' lived experience!

**Breakout #3 - Workshop,**  
**grade-band, 9-12**  
**How to Make Science Instruction**  
**More Meaningful, Rigorous, and**  
**Equitable**

*Presenter: Victor Sampson,*  
*University of Texas at Austin*

Learn how to make learning experiences more meaningful, rigorous, and equitable using the Argument-Driven Inquiry instructional model. The workshop will demonstrate how this model can help students learn to make sense of.

**2:45pm - 4:00pm**  
**Social Networking Reception**

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