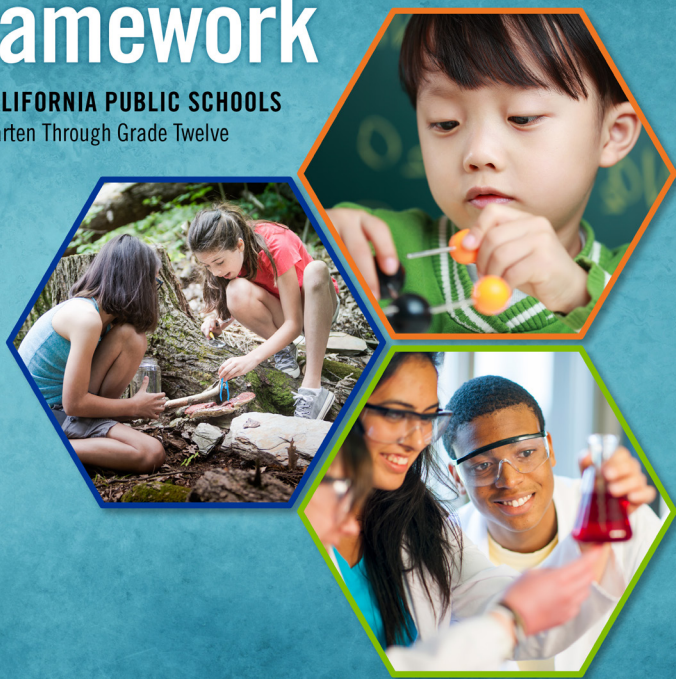


# Science Framework

FOR CALIFORNIA PUBLIC SCHOOLS  
Kindergarten Through Grade Twelve



# Using the CA Science Framework to Implement the NGSS

## STATEWIDE ROLLOUT



## ABOUT THE SESSIONS

Check-in for the two-day sessions begins at 7:30 a.m. followed by a continental breakfast. Sessions run from 8 a.m. to 4:30 p.m., both days.

### AUDIENCE

Grades K-12 Educators, Curriculum Leads, and Administrators. District teams of 4 - 6 people and one administrator are encouraged.

### COST

\$250 per attendee. Fee includes all materials, continental breakfast and lunch, both days. Credit card payment only at time of registration.\*

**REGISTER HERE:** <https://www.regonline.com/NGSS2017StatewideRollout>

**CONTACT:** Amy Kennedy • [akennedy@sjcoe.net](mailto:akennedy@sjcoe.net) • (209) 468-9027

*\*Purchase order exceptions are on a case-by-case basis and only if preapproved.*

## DATES and LOCATIONS

### MAY

3 - 4 San Joaquin COE, Stockton

### JUNE

7 - 8 Los Angeles COE / Orange COE  
Excelsior High School, Norwalk

### AUGUST

22 - 23 San Bernardino COE / Riverside COE  
UC Riverside

### SEPTEMBER

12 - 13 Alameda COE / CSU East Bay, Hayward

### NOVEMBER

7 - 8 San Diego COE / Marina Village  
8 - 9 Fresno COE / Radisson Hotel, Fresno  
14 - 15 Siskiyou COE / CSU Chico  
29 - 30 Ventura COE, Camarillo

### DECEMBER

4 - 5 Santa Clara COE, San Jose



# DETAILED SESSION INFORMATION

## DAY ONE

### Morning Session

## FRAMEWORK INTRODUCTION

The CA Science Framework is a comprehensive guidance document to help implement the CA NGSS by including grade level descriptions, snapshots, vignettes and connections to the Environmental Principles and Concepts, the California ELA, ELD and math standards and engineering practices.

## PHENOMENA

### (TK-2 - HS Grade Span)

Phenomena-based instruction is a primary feature of the NGSS classroom. Learn what phenomena are, how to identify useful phenomena, and how phenomena-based instruction supports three-dimensional learning.

## DAY ONE

### Afternoon Session

## PHENOMENA-BASED LEARNING SEQUENCES

### (TK-2 - HS Grade Span)

NGSS learning sequences, based on vignettes or snapshots in the California Framework for science, begin with phenomenon and include explorations leading to explaining the phenomenon. After experiencing a grade span appropriate learning sequence (K-2, 3-5, 6-8 discipline specific or integrated, 9-12 earth-biology or earth-physics) participants will discuss how the sequence provided understanding of the standards as well as support a variety of learners. Participants will become aware of the location of additional resources for teachers in the California Framework.

## DAY TWO

### Morning Session

## STATE ASSESSMENT

The pilot version of the California Science Test (CAST) will be administered in Spring 2017. CDE representatives will explain the format of the assessment and give updates about the future of statewide science assessments in California.

## CLASSROOM ASSESSMENTS

### (TK-2 - HS Grade Span)

Classroom assessment is critical to quality teaching and learning. Participants will debrief the grade-level learning sequence in terms of opportunities for formative assessment, experience a three-dimensional summative assessment, and make connections to the Framework Assessment Chapter.

## DAY TWO

### Afternoon Session

- **Administration:** Site level and district administrators need to have the skills to implement, evaluate, and identify NGSS resources in order to provide access to all standards for all students. In this session, participants will review the NGSS-CA Frameworks as they relate to access and equity and implementing high-quality science instruction: Professional learning, leadership, and support. LCAP goals will be discussed as they relate to implementing state standards and providing access to all learners.
- **Elementary Connections:** Provide participants with a common experience with a CA Science Framework to identify the science connections to ELA, math, and ELD and how those standards can be taught through science. Using a framework vignette, participants will be given time to delve deeply into a lesson and design targeted ELD, math, and literacy connections.
- **HS Course Sequence Models:** This session will help participants engage in meaningful conversation and learning that is necessary to analyze different high school models to prepare students for college, career, and life skills required by NGSS.
- **Beyond 3D:** The new science framework calls on teachers to go beyond the three dimensions by integrating California's Environmental Principles & Concepts (EP&Cs) and engineering design into science instruction. Participants will actively investigate the EP&Cs and apply them as part of a hands-on engineering design activity.
- **Professional Learning Design:** Examine the Professional Learning chapter of the CA Science Framework and apply the guidance and ideas to building a professional learning model that can inform your work on LCAPs, selection of learning opportunities, and science professional learning priorities for the next several years of NGSS implementation.
- **Access and Equity:** Develop an awareness of the "Science for All" vision of NGSS and become familiar with resources within the CA Framework.
- **Intro to NGSS:** Designed for people new to NGSS, this session provides an overview of the NGSS architecture, shifts required to teach phenomenon-based three-dimensional learning experiences, and ways to begin implementation.