

# Region 10 Riverside | Inyo Mono | San Bernardino





### District Science Leadership CoP Meeting Agenda

WiFi Portal: UCR Guest

**PSSW:** (please register to

receive a password)

[All Sciences ~ All Students]
A STEM Initiative of Region 10

**February 7, 2024** 

Advancing Equity and Access in Science Education: Leveraging our Community of Practice to Support NGSS Implementation strategies for all students via pre-determined Vital Behaviors.

Facilitators: Yamileth Shimojyo (RCOE), Mariano Aranda (SBCSS), Cheryl Frye (RCOE)





# Region 10 Science Leadership : Better Together!







Mariano Aranda
Science Coordinator
SBCSS



Cheryl Frye
STEM Administrator
RCOE



Michelle Sanchez

Administrator's Secretary

RCOE



Yamileth Shimojyo STEM Administrator RCOE



Kelley Ambriz
Administrator's Secretary
RCOE





# Region 10 Science Leadership: Better Together!



### **Welcome Cheryl**



With a B.S. in Biology from Cal Poly, B.S. in Elementary Education from the University of Utah and a M.S. in Educational Psychology from UCR, I have 26 years of experience in the education sector. My journey has included roles as genetics researcher where I was on the team that found the first breast cancer gene BRCA-1, science teacher, Science/STEM TOSA, and Curriculum and Instruction Coordinator. My work focuses on integrating real-world applications, fostering critical thinking, and promoting an inquiry learning experience through STEM, NGSS and math.

I am engaged in many opportunities through the Educational Testing Service and California Department of Education analyzing California Science Test (CAST) items, writing items and determining threshold setting standards. My multiple experiences facilitating teachers with the Science and Math Frameworks led to implementation and progress monitoring of evidence-based practices and strategies district-wide. I have led the implementation of district-wide CAASPP Interim Assessments in ELA and Math and have begun facilitating teachers on the analysis of the new science interim assessments. These various activities led to my appointment to the California State Board Instructional Quality Commission in 2024.

Recognizing the importance of diversity in STEM fields, I actively work towards creating environments that encourage participation from all students, regardless of background, preparing all students for the challenges and opportunities of the future.





### **DSL Community of Practice Goals 23-24**

- Goal 1 Implementation of high quality science instructional strategies in Region 10
- Goal 2 Building leadership capacity of our network members
- Goal 3 Regional advocacy efforts toward the inclusion of science instruction, K-12
- Goal 4 Connect with various STEM partners in our region to gain knowledge about industries, colleges and education partners that provide services to students



# DSL Community of Practice Meeting Locations/Dates, 23-24

Dates	Sponsor Partner Locations	Registration Links
September 20, 2023	<u>Flabob Airport</u>	https://events.rcoe.us/DSL2023-24-FLABOB  Contact Flabob @ programs@flabob.org
November 16, 2023	<u>Esri</u>	Science (k12oms.org)
February 7, 2024	UCR MESA	https://events.rcoe.us/DSL2023-24-UCRMESA
April 24, 2024	<u>La Brea Tar Pits</u>	https://sbcss.k12oms.org/31-241231



# DSL Community of Practice Meeting Locations/Dates, 24-25

Dates	Potential Sponsor Partner Locations	
September 18, 2024 RCOE	Naval Surface Warfare Center, Corona	
November 13, 2024 SBCSS	CUSM School of Medicine, Colton	
February 5, 2025 RCOE	UCR Master Gardeners, Riverside	
April 23, 2025 SBCSS	MEEC, High Desert	



# Agenda







#### District Science Leadership CoP Meeting Agenda NGSS Implementation via Key Behaviors All Sciences ~ All Students

Wednesday, February 7, 2024, 9:00 am - 3:00 pm
Location: UC Riverside (MESA) | 3701 Canyon Crest Drive, Riverside, CA 92507
Region 10 YouTube Channel | Wifi: UCR-GUEST network (registration required)

Advancing Equity and Access in Science Education: Leveraging our Community of Practice to Support NGSS Implementation strategies for all students via pre-determined Vital Behaviors.

Facilitators: M. Aranda (SBCSS), Cheryl Frye (RCOE), Y. Shimojyo (RCOE)

8:30 - 9:00	Check-in and Informal Networking  • Light Breakfast and coffee
9:00 - 9:30	Welcome and Opening Yamileth Shimojyo, Administrator, RCOE Mariano Aranda, Coordinator, SBCSS Carlos Gonzalez, Associate Director, CA MESA; Director, UCR MESA Programs
9:30-11:30	Engage/Explore: Background / MESA activity / Campus Tour
11:45 - 12:30	LUNCH @ the Campus HUB
12:45 - 1:00	Kits for Kids Recognition Heather Schulte, Outreach Associate
	** Statewide Update: CISC Science and CAL-MSCS  • CAST Interims Available to Preview now!
1:00 - 2:00	Explain: Region 10 NIC Members/Leadership  Fish Bone Diagram, Defining the Problem and Root Cause Analysis Needs Assessment / Empathy Interviews Scheduling







# Engage / Explore

9:30 - 11:30

Carlos Gonzalez Associate Director, CA MESA Director, UCR MESA Programs

**UCR MESA Programs** 





# Lunch! @ Student HUB



### **Lunch Conversation:**

- 1. What are your current implementation successes?
- 2. What are your current implementation challenges?









Presented by: Avi Vigdorchik, Outreach Associate

The award goes to:

# Riverside Unified School District

Dale Kinnear, RUSD Board Member

Julie VanDenburgh Smith, Instructional Services Specialist, TK-12 Science Steve Kong, Director Curriculum & Assessment, Instructional Services





### A Better Way: Learning-by-Doing

"The History of American Education includes a graveyard of good ideas condemned by pressure for fast results".

-- James Hiebert, Ron Gallimore and Jim Stigler

Learning to Improve, How America's Schools Can Get Better at Getting Better



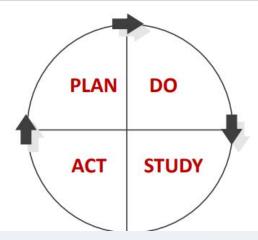
### A Better Way: Learning-by-Doing





# Disciplined Inquiry The 3 Questions of Improvement Science

- 1. What specifically are we trying to accomplish?
- 2. What change might we introduce and why?
- 3. How will we know that the changes are an improvement?



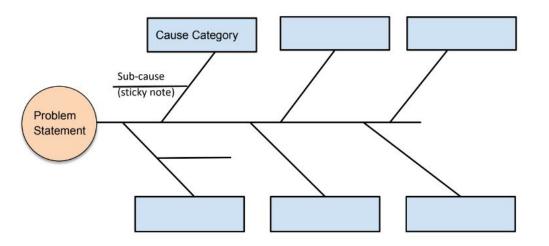


# **Explain:** Fishbone Diagram

DSL CoP Fishbone Diagram R10 9/20/23 - Google Slides

#### **Components of Fishbone Diagrams**

- The problem statement is recorded in the "head" of the fishbone diagram. The problem statement
  focuses on a concrete problem; either a gap in performance or unwanted variation in a system or
  process.
- The causes of the problem are located on the "bones" of the fishbone diagram. Each bone is labeled with a cause category, and related sub-causes are located underneath.





# Statewide Update

- CISC Science Subcommittee UPDATE
  - Mathematics, Science and CS Professional Learning Grant
  - > CAST Interim Assessments
    - Available for Preview now!



### 2023-24

### **Interim Assessments - At-a-Glance**

- Smarter Balanced ELA
- Smarter Balanced Mathematics
- CAST (page 8, At-a-Glance)
- ELPAC

2023-24 Interim Assessments At-a-Glance (PDF)

#### 2023–24 Interim Assessments At-a-Glance (PDF) (July 2023)

This document lists, by grade level or grade span, all available CAASPP and FLPAC Interim Assessments.

#### 2023-24 Interim Assessments At-a-Glance

#### CAST

During the 2023–24 school year, there will be 9 CAST Interim Assessment (CAST IA) forms available, each assessing one or more science domains. The CAST IAs assess three-dimensional Performance Expectations. The Grade 3 CAST IA—I, Grade 4 CAST IA—I, and Grade 5 CAST IA—I assessments will include content in Earth and Space Sciences, Life Sciences, and Physical Sciences. The table below lists the available CAST IAs by grade level or grade span.

#### CAST IAs

	Four	Five	(Grades Six Through Eight)	(Grades Nine Through Twelve)
Yes	No	No	No	No
No	Yes	No	No	No
No	No	Yes	No	No
No	No	No	Yes	No
No	No	No	Yes	No
No	No	No	Yes	No
No	No	No	No	Yes
No	No	No	No	Yes
No	No	No	No	Yes
	No No No No No No	No Yes  No No  No No  No No  No No  No No  No No  No No	No Yes No No No Yes No	Yes         No         No         No           No         Yes         No         No           No         No         Yes         No           No         No         No         Yes           No         No         No         Yes           No         No         No         Yes           No         No         No         No           No         No         No         No           No         No         No         No

California Department of Education 2023–24 Interim Assessments—CAST



### **CAST Interim Assessment Resources**

Note: the CAST Interim Assessments are now available for preview in the Interim Assessment Viewing System. Training guides, exemplars, and answer keys are also available now in TOMS. The CAST Interim Assessments will be fully available to administer and generate results in late October, 2023.

- The CAST Interim Assessments in grades three, four, and five will each assess all three science domains.
- Middle school and high school will each have three interim assessments that assess a single science domain.
- Each CAST interim assessment will consist of two segments: one discrete segment and one performance task (PT) segment.
- The PT consists of four to six items, including one constructed response item worth 2
  points that must be hand-scored.



# **Interim Assessment Viewing System**

The Interim Assessment Viewing System contains all of the Smarter Balanced Interim Assessments. It is designed to allow teachers to see the interim assessments and understand the types of questions on the IABs, Focused IABs, and the ICAs and the scope of the content on an interim assessment. It allows teachers to better gauge when to administer a specific interim assessment.

**CAASPP Interim Assessment Administration Resources** 



## Lets Dig into the Resources!

#### **Blueprints**

CAST Interim Assessment Blueprint (PDF) (January 2023)

What is it?

What is its Implementation Potential?

#### **Item Specifications**

Item specifications describe how items for the CAST are developed to assess the California Next Generation Science Standards (CA NGSS).

**CAST Item Specifications** web page

#### **CAST Constructed Response Annotated Examples**

These annotated examples were created for selected constructed response items on the CAST practice tests. Practice test scoring guides and more can be found on the <u>Online Practice Test Scoring Guides</u>, <u>PFAs</u>, and <u>DFAs</u> web page.

- <u>CAST: Practice Test Constructed Response Annotated Examples–Grade Five (PDF)</u>
- <u>CAST: Practice Test Constructed Response Annotated Examples–Grade Eight (PDF)</u>
- <u>CAST: Practice Test Constructed Response Annotated Examples-High School (PDF)</u>



# CA Assessment Accessibility Resource Matrix

The <u>California Assessment Accessibility Resources Matrix(DOCX)</u> displays the embedded and non-embedded universal tools, designated supports, and accommodations (UDAs) allowed as part of the California Assessment of Student Performance and Progress (CAASPP) and English Language Proficiency Assessments for California (ELPAC) for 2023–24.



# Elaborate: STEM Ecosystem



#### **Initiatives in Support of High Quality Science Instruction**

# **District Science Leadership Community of Practice 23-24**

• 9/20/2023 11/16/2023

2/7/2024
 4/24/2024

### **STEM Summer Learning Labs**

- STEM PULL (Public Utilities)
- STEM LEAPS (Law Enforcement and Public Safety)
- STEM ID (In Defense)
- STEM Solutions
- STEM I AM (in Advanced Manufacturing)

Science Fair Student Research Teacher Workshop

# **Advancing Student Research Teaching Academy - COMING 2025!**

**Empowering MS-HS teachers to support Student Research** 





# Elaborate: STEM Ecosystem



#### **Initiatives in Support of High Quality Science Instruction**



SCIENCE COMPETITIONS

**JOURNALISM** 

**OUTREACH & EQUITY** 

GET INVOLVED

#### **Volunteer at Regeneron ISEF 2024**

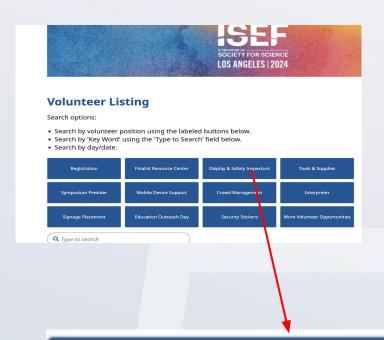
Regeneron ISEF 2024 is coming to Los Angeles, CA from May 11-17, 2024! Learn more about how you can volunteer and support the best young scientists and engineers from around the world. More than 500 volunteers will be needed across a spectrum of activities.

- <u>Learn more about the volunteer opportunities</u> will be available during the week in a range of shifts.
- · Download "How You Can Help".
- · Learn more about serving as a Grand Award Judge.
- Sign up to volunteer at the 2024 Regeneron ISEF!



SIGN UP TO VOLUNTEER!

- Volunteer Registration
- Volunteer Role



**Display & Safety Inspectors** 





### **Evaluate:**

### Measurement of our Region 10 NGSS Vital Behaviors

### 

# **Measurement of Local NGSS Vital Behaviors**

me of School Site -	of School Site - Name of District -			
NGSS Implementation Vital Behaviors Local Data 2021-2022				
Number of Classrooms	Vital Behavior	Implementation Percentage		
	Vital Behavior #1			
	Vital Behavior #2			
	Vital Behavior #3			
	Vital Behavior #4			
	Vital Behavior #5			
Total of Classrooms Visited:		Average:		

\*A Region 10 NGSS/STEM Initiative to support inclusive, high quality science instruction for ALL



# How can County Office Leadership assist your efforts on high quality science instruction for ALL?

We are listening....

Mariano Aranda- SBCSS mariano.aranda@sbcss.net

Yamileth Shimojyo-RCOE yshimojyo@rcoe.us

Michelle Sanchez-RCOE
msanchez@rcoe.us

Cheryl Frye-RCOE cfrye@rcoe.us

Kelley Ambriz-RCOE kambriz@rcoe.us



Science Fair for Riverside and San
Bernardino
San Bernardino, Inyo, Mono Science and
Engineering Fair
https://simsef.zfairs.com

Riverside Science and Engineering Fair <a href="https://www.rcoe.us/about-us/superinte">https://www.rcoe.us/about-us/superinte</a> <a href="mailto:ndent/office-of-the-superintendent/community-engagement-and-partnerships/student-events/science-and-engineering-fair">https://www.rcoe.us/about-us/superinte</a> <a href="mailto:ndent/office-of-the-superintendent/community-engagement-and-partnerships/student-events/science-and-engineering-fair">https://www.rcoe.us/about-us/superinte</a> <a href="mailto:ndent/office-of-the-superintendent/community-engagement-and-partnerships/student-events/science-and-engineering-fair">https://www.rcoe.us/about-us/superinte</a> <a href="mailto:ndent/office-of-the-superintendent/community-engagement-and-partnerships/student-events/science-and-engineering-fair">https://www.rcoe.us/about-us/superintendent/community-engagement-and-partnerships/student-events/science-and-engineering-fair">https://www.rcoe.us/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">https://www.rcoe.us/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">dent-events/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">https://www.rcoe.us/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">dent-events/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">dent-events/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">dent-events/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">dent-events/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-fair">dent-events/science-and-engineering-fair</a> <a href="mailto:dent-events/science-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-and-engineering-an



#### Coordinator Virtual SRC Office Hours

In support of the <u>Riverside County Science and Engineering Fair</u>

Zoom Meeting Link: https://rcoe.zoom.us/i/92311136767

#### Coordinator Virtual SRC Office Hours

These office hours are dedicated to supporting RCSEF affiliated Coordinators. Nick Perez will host these sessions in order to provide technical support and guidance to Coordinators to help support the promotion of district fair award winners to the RCSEF.

\*Event inquiries including zFairs may be directed to: Yadira Chavelas, ychavelas@rcoe.us



#### Office Hour Dates/Times:

Monday, January 8, 2024, 3:30 pm - 5:30 pm Monday, January 22, 2024, 3:30 pm - 5:30 pm Monday, January 29, 2024, 3:30 pm - 5:30 pm Monday, February 5, 2024, 3:30 pm - 5:30 pm Tuesday, February 6, 2024, 10:00 am - 12:00 pm Thursday, February 8, 2024, 10:00 am - 12:00 pm Friday, February 9, 2024, 12:00 pm - 1:30 pm

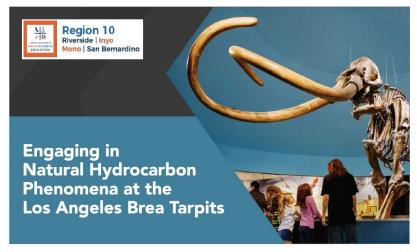
SRC Forms Technical Support		
Form 1, Checklist for Adult Sponsor	Form 4, Human Participants	
Form 1A, Student Checklist	Sample Informed Consent Form	
Research Plan/Project Summary	Form 5A, Vertebrate Animals Form	
Form 1B, Approval Form	Form 5B, Vertebrate Animals Form	
Form 1C, Regulated Research Institutional/Industrial Setting Form	Form 6A, Potentially Hazardous Biological Agents Risk Assessment Form	
Form 2, Qualified Scientist	Form 6B, Human and Vertebrate Animal Tissue Form	
Form 3, Risk Assessment	Form 7, Continuation/Research Progression Project Form	

Riverside County Office of Education supports rigorous student research via the Riverside County Science and Engineering Fair.

Science and Engineering Fair | Riverside County Office of Education, 2023 - 2024.

# 2024 Coordinator Virtual SRC Office Hours





If you had to leave something in the tar to tell people 10,000 years from now what life was like for you today, what would you leave?

Do you want to learn about how petroleum is distilled as a natural deposit and how people used it throughout our California History?

Then join Region 10 District Science Leadership at the La Brea Tarpits Museum for this engaging groundbreaking natural phenomenon. We have learned a lot from the ice age in Los Angeles by what we have excavated in the tar pits.

#### Audience

Science teachers on special assignment, teachers on assignment, coaches, administrators and science leaders

#### April 24, 2024

9:00 a.m. - 2:00 p.m.

#### La Brea Tar Pits Museum 5801 Wilshire Boulevard Los Angeles, CA 90036

#### Fee

\$100 per person Breakfast, lunch and parking included.



#### Registration

https://sbcss.k12oms.org/31-241231





#### Transforming lives through education

Curriculum/Instruction and Academic Enrichment | Education Support Services Mariano Aranda | mariano.aranda@sbcss.net | 909.386.2612 | www.sbcss.net

### Thank You

# See you @ the La Brea Tar Pits April 24, 2024

Engaging in Natural Hydrocarbon Phenomena at the La Brea Tar Pits

https://sbcss.k12oms.org/31-241231