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PSSW: 213763dino

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LA BREA TAR PITS & MUSEUM

District Science Leadership CoP Meeting

[All Sciences ~ All Students]

A STEM Initiative of Region 10

April 24, 2024 | La Brea Tar Pits

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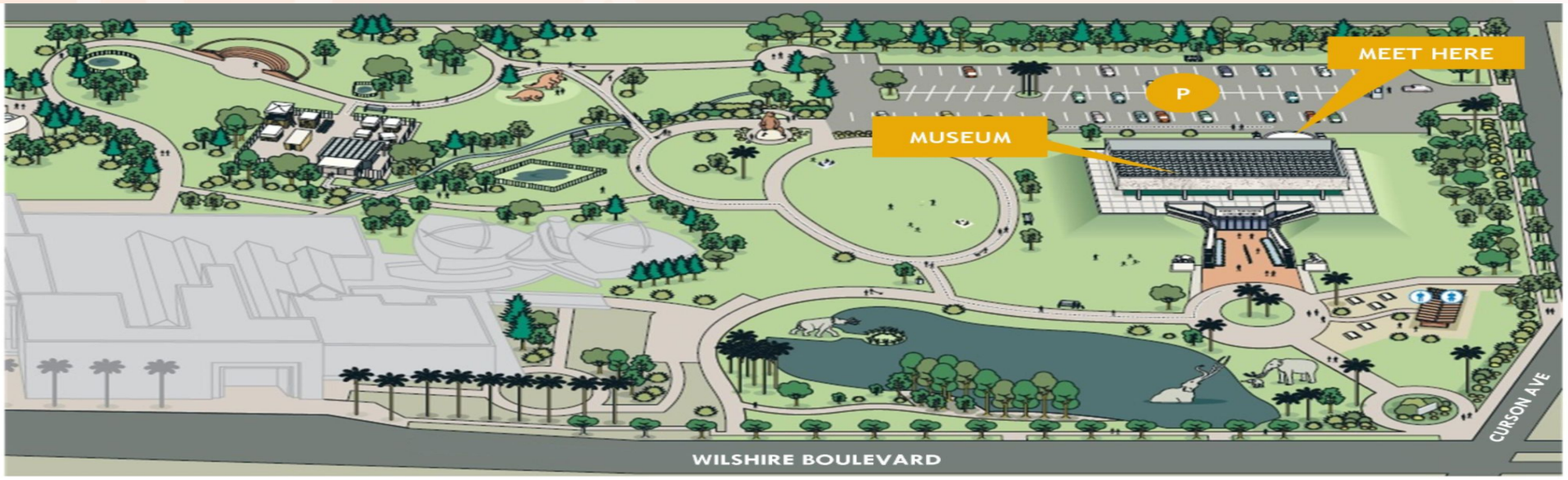
Advancing Equity and Access in Science Education: Leveraging our Community of Practice to Support NGSS Implementation strategies for all students via pre-determined Key Behaviors.

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



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Region 10 Science Leadership
Better Together!
Facilitators/Support Staff

Mariano Aranda
Science Coordinator
SBCSS

Asia-lani Ekeroma
Project Technician
SBCSS

Cheryl Frye
STEM Administrator
RCOE

Michelle Sanchez
Administrator's Secretary
RCOE

Yamileth Shimojyo
STEM Administrator
RCOE

Kelley Ambriz
Administrator's Secretary
RCOE

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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

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

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

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

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Dates	Sponsor Partner Locations	Registration Links
September 18, 2024	Naval Surface Warfare, Corona	*coming soon!*
November 16, 2024	CUSM School of Medicine, Colton	
February 7, 2025	UCR Master Gardeners, Riverside	
April 24, 2025	MEEC, High Desert	

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Agenda

LA BREA TAR PITS & MUSEUM

8:30 – 9:00	**Check-in and Informal Networking** Breakfast
9:00 – 9:10	**Welcome and Opening** Yamileth Shimojyo, Administrator, RCOE Mariano Aranda, Coordinator, SBCSS Cheryl Frye, Administrator, RCOE
9:10- 11:40	**Opening Address:** Cassandra Baron, Manager, School & Teacher Program Natural History Family of Museums Overview of Education programs, how to subscribe ○ **School and Teacher Programs Overview (10-15 mins)** ○ **Excavator Tour: 9:30 - 10:30 am** ○ **Micro fossil sorting 10:30 - 11:30 am,** ■ **in classroom modification with owl pellets, etc**
11:45 - 12:30	**LUNCH** **Roof top-Accessibility**
12:30-1:00	**Vital Behavior for Science Leaders: CAST Interim Assessments**
1:00 - 2:00	**Explain:** Visual Thinking Strategies Introduction in Classroom VTS Demonstration in the gallery Split into 3 groups Museum Gallery Self-Exploration Reconvene in Classroom, Overview, & Resource Share
2:00-3:00	Voluntary: CAST Interim Assessment Deep Dive

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LA BREA TAR PITS & MUSEUM

Engage : Opening Address by our Host

School & Teacher Programs Team NHMLAC

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School Programs Team

Cassandra Baron
(she/her/hers)
Manager, School & Teacher Programs

NHM

Julie Vannordstrand
(she/her/hers)
Program Manager, School Programs

schoolprograms@nhm.org

TAR PITS

Andrew Agustin
(he/him/his)
Program Manager, School Programs

Diana Sanchez
(she/her/hers)
Program Manager, School Programs

schoolprograms@tarpits.org

VISION

To inspire wonder, discovery, and responsibility for our natural and cultural worlds.

VALUES

adventurous

We are curious and bold, with an insatiable desire to discover and share new ideas and knowledge.

inclusive

We foster and promote accessibility, collaboration, and respect for all both within our museums and out in our community.

authentic

We inspire trust by sharing with our audiences our unparalleled collections and active research to help them better understand the world around them.

intentional

We are driven by our core principle of studying, educating, and inspiring audiences about our natural and cultural worlds.

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School & Teacher Experiences

Onsite Field Trips

- FREE to all California accredited schools, including:
  - All students
  - All school staff (teachers, 1:1 aides, admins)
  - All chaperones
- Schools also receive free add-on tickets, such as pavilions, temp exhibits, performances and guided programs

Free Educational Resources

- Learning Resources:
  - Videos
  - Lesson Plans
  - Activities
  - Teacher Guides
- Self-Guided Virtual Field Trips

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Education Programs Vision

We aim to have our programs empower participants to:

Build critical thinking skills through scientific literacy and culturally responsive practices

Forge connections with each other and our collections & research

Find value and relevance in our natural and cultural worlds

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Our Impact

During the 2022 - 2023 School Year:

FIELD TRIPS

- Over **116,000** served at NHM
- Over **43,000** served at LBTP
- Title I designation: 70%

EDUCATOR WORKSHOPS

- Over **600** participants at both sites

HOMESCHOOL DAYS

- Over **4,700** homeschoolers at both sites

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Pre-K - 1st Grade

Growing Home (NHM Specific)

Students will learn about insect habitats in our Nature Gardens! Drawing upon what young students already know about what animals need to survive, this hands-on and exploratory activity allows students to discover what a habitat is and what insects need to survive. In our Edible Garden, students will have the opportunity to discuss their ideas about habitats, find examples of what bugs need in a garden scavenger hunt, and build their own bug home out of natural materials.

Windows into Nature

Students will take a deep-dive into one of our many North American animals! Through different animal stories, students will learn about a specific animal and how it lives. Then, we'll find our animal thought a scavenger hunt in the museum. Our educators will lead interactive discussions through dialogic reading and Visual Thinking Strategies of our corresponding animal diorama. Students will also have the chance to touch an artifact from their animal, like a porcupine quill or a coyote pelt!

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2nd - 5th Grade

Pond Life (NHM Specific)

Students will learn discover the diversity of pond life! Students will explore the many specimens in our Nature Gardens pond by using scientific observation skills. Our guides will lead students to safely collect and document macro-invertebrates in our pond, just like real scientists! Students will have the chance to use authentic tools like magnifying glasses and field guides to learn more about the unique wildlife that lives here in Los Angeles.

Fossil Detectives

Solve the mystery! What were ancient animals like when they were alive? Through observation and questioning, students will investigate fossil animals and their habitat to find the answer. Our guides will lead students to practice coming up with hypotheses and recording ideas in a field journal, just like real paleontologists! The foundation of this program comes from a method known as Visual Thinking Strategies (VTS).

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Backyard Biodiversity

Grades 6 - 12

PROGRAM FRAMEWORK

- Introduction to vocab - **Community Science** & **Biodiversity**
- Students will consider: Why is biodiversity important?
- Conduct survey in the Museum's Nature Garden
- Write and draw observations in field journal
- Identify insects using ID Guide
- Conclude with an assessment of the garden's biodiversity based on observations

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Homeschool Days

During Homeschool Days, homeschoolers and their families receive **free Museum admission and special Homeschool Day programming!** We offer these dates two times a year at La Brea Tar Pits and Museum, each with a different theme.

Past Topics:

- "All About Asphalt!" at LBTP
- "Fossil Fanatics" at NHM
- "STEAM Pathways" at LBTP
- "Plants, People & Pollinators" at NHM

VTS in Science

Visual Thinking Strategies Facilitation

Natural History Museums of Los Angeles County

NATURAL HISTORY MUSEUM

LA BREA TAR PITS

WILLIAM S. HART MUSEUM

What is VTS?

VISUAL THINKING STRATEGIES

Essentially, VTS is a method to facilitate discussion using a moment of observation and three questions to support visual literacy and aesthetic development

The three main questions are:

1. What's going on in this image?
2. What do you see that makes you say… ?
3. What more can we find?


LOWELDIDA

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Let's reflect

- What just happened?
- What did you notice?
- How did it feel to be a part of that dialogue?

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Visual Thinking Strategie

The Environment of VTS:

- Participant-centered
- Developmentally appropriate
- Open and accepting
- Collaborative
- Inclusive
- Engaging
- Supports risk-taking

1. **Starting the Discussion:** Observation + moment of silence

1. **Asking Questions:**
   What's going on in this picture?
   What do you see that makes you say that?
   What more can we find?

1. **Responding to Participant Comments**

- **Listen carefully**, making sure that you hear and understand it each inference. Clarify if needed.
- **Paraphrase each comment.** Use this as an opportunity to add in new vocabulary. You can change the wording, but not the meaning of what is said.
- **Point to what they observe** in the image, even if observation is not new.
- Accept each comment openly.
- **Link answers that relate**, including both agreements and disagreements.

1. **Concluding the Discussion**:
   Thank the group for their participation. Paraphrase the journey of conversation.

From Art to Science: VTS @ NHMLAC

Art is subjective, but science is perceived to be fixed.

So, how does VTS work with scientific content?

NHMLAC have been using VTS in guided programs since 2011.

Things to remember when using VTS with scientific content:

- VTS in science is about encouraging *scientific discovery*
- Students can be given information prior to a VTS in science experience
- VTS in science experiences can be supported with other components, i.e. - journaling

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Adjusting VTS for Science

Specimen Questions:

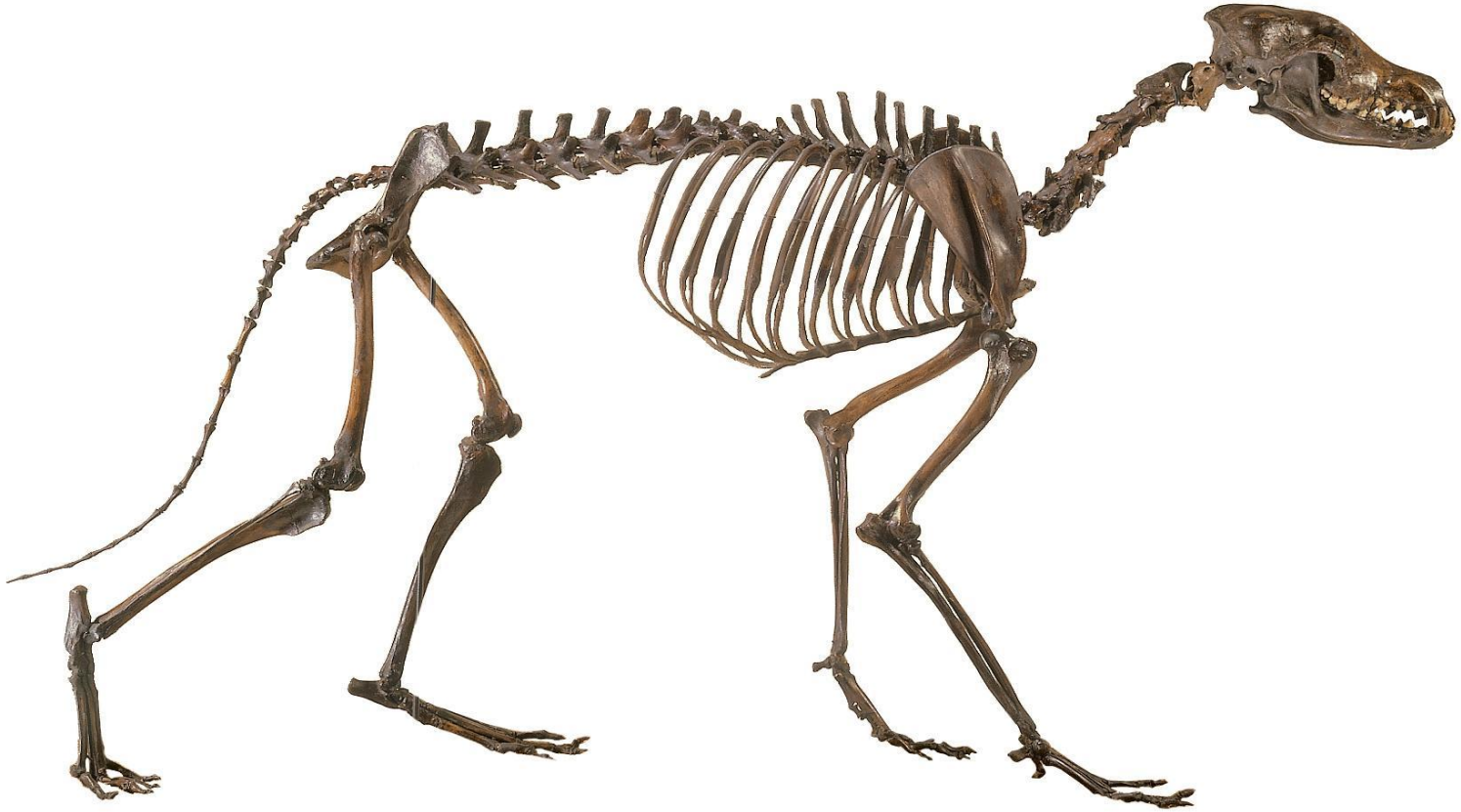
- What do you notice about this animal?
- What do you see that makes you say that?
- What might that tell us about how this animal lived?
- What more can we find?

Environment Questions:

- What's going on in this picture? or What's going on here?
- What do you see that makes you say that?
- What might that tell us about what the environment was like?
- What more can we find?

3 Facilitation Techniques:

- Paraphrase comments neutrally.
- Point at the area being discussed.
- Link contrasting and complementary comments.



Lunch! @ Roof Terrace

Lunch Conversation:

1. What are your current implementation successes?
2. What are your current implementation challenges?
3. What local measures do you currently have in place to show progress of implementation of science instruction?

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Explain: Statewide Update

CISC Science Subcommittee UPDATE

- Using Distance from Standard (DFS) for Science
- Participation Rate
- Aggregating High School

Feedback Needed

Differences between Using DFS for ELA/Math and Science

ELA/Math	Science
Larger ~500 point scale difference between lowest and highest score	Smaller 100 point scale difference between lowest and highest score
About 45% of the scores scale is at or above standard	About 35% of the scores scale is at or above standard
Each grade as a different scale range (467 to 617 point range)	Each grade has the same scale range (100 point range)

High School Reporting Options for Status

- **Current** Year Scores
  - All high schoolers who tested in 2023–24
    - 10th graders in 2023–24
    - 11th graders in 2023–24
    - 12th graders in 2023–24
- **Cumulative** Scores
  - All 12th graders who tested in either:
    - 10th grade (2021–22)
    - 11th grade (2022–23)
    - 12th grade (2023–24)

CDE would wait to report 10th and 11th grade testers until their 12th grade year

Technical Considerations with Interpretation

- If the state had the following results:
  - -17 DFS for ELA
  - -44 DFS for Math
  - -13 DFS for Science
- People would likely interpret the -13 using the scale they are familiar with for ELA/Math
  - A rough “translation” of the score to the ELA/Math scale would be -61

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Elaborate: STEM Ecosystem

Initiatives in Support of High Quality Science Instruction

District Science Leadership Community of Practice 24-25

September 18, 2024, RCOE

- Location: Naval Surface Warfare, Corona

November 13, 2024, SBCSS

- Location: CUSM School of Medicine, Colton

February 5, 2025, RCOE

- Location: UCR Master Gardeners, Riverside

April 23, 2025, SBCSS

- Location: MEEC, High Desert

District Science Teachers CoP, All Content 24-25

Fall

August 28, 2024

RCOE- Flyer- *COMING SOON!*

Location - *COMING SOON!*

Spring

January 22, 2025

SBCSS- Flyer - *COMING SOON!*

Location - *COMING SOON!*

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Elaborate: STEM Ecosystem

Initiatives in Support of High Quality Science Instruction

Equitable math, Creativity and Literacy - Come quilt with us! (Elementary)

August 6, 2024 RCOE Murrieta
September 19, 2024 RCOE Murrieta

Classroom Safety, Annual Training

September 24, 2024

Exploring Human Impact Performance Expectations for K-5 classroom: Implementing AB 235 Climate Change

October 17, 2024 RCOE Riverside

Health Education CoP

November 14, 2024 RCOE Murrieta
February 11, 2025 RCOE Riverside

California Healthy Youth Act (CHYA) Principals & District Leaders

August 26, 2024 Virtual, 3;30-4:30
January 23, 2025 Virtual, 3:30-4:30

Science Fair Student Research Teacher Workshop

Advancing Student Research Teaching Academy: 2/26/25 - 2/28/25

Empowering MS-HS teachers to support Student Research

Please register:

STEM Summer Learning Labs

- **STEM PULL (Public Utilities) - 7/8/24 - 7/12/24**
- **STEM LEAPS (Law Enforcement and Public Safety) - 7/15/24 - 7/19/24**
- **STEM ID (In Defense) - 6/24/24 - 6/28/24**
- **STEM Solutions - 7/22/24 - 7/26/24**
- **STEM I AM (in Advanced Manufacturing) - 7/22/24 - 7/26/24**

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CAST Interim Assessment Training

Hosted by RCOE STEM

Strategies for K-5 CAST Interim Assessments Workshops
September 3, 2024 RCOE Murrieta, https://events.bizzabo.com/601923
December 3, 2024 Coachella, https://events.bizzabo.com/601961
April, 1, 2025 RCOE Riverside, https://events.bizzabo.com/601952

Strategies for 6-8 CAST Interim Assessments Workshops
September 5, 2024 RCOE Murrieta, https://events.bizzabo.com/601875
December 5, 2024 Coachella, https://events.bizzabo.com/601881
April 3, 2025 RCOE Riverside, https://events.bizzabo.com/601841

Strategies for K-8 California Alternate Assessment (CAA) in Science: Unlocking the Potential
September 11, 2024 RCOE Murrieta, https://events.bizzabo.com/591778

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NGSS/Publisher Aligned Overview

OMS LINK	EVENT TITLE (OFFICIAL)	DATE(S)	EVENT TIMES	SITE
https://sbcss.k12oms.org/31-248745	NGSS Overview K-5	October 17, 2024	8:00 - 3:00	BRIER
https://sbcss.k12oms.org/31-248745	NGSS Overview K-5	February 6, 2025	8:00 - 3:00	DMESC
https://sbcss.k12oms.org/31-248743	NGSS Overview 6-8	October 8, 2024	8:00 - 3:00	DMESC
https://sbcss.k12oms.org/31-248743	NGSS Overview 6-8	December 5, 2024	8:00 - 3:00	WEST END
https://sbcss.k12oms.org/31-248743	NGSS Overview 6-8	January 30, 2025	8:00 - 3:00	BRIER
https://sbcss.k12oms.org/31-248744	NGSS Overview 9-12	October 22, 2024	8:00 - 3:00	TBD
https://sbcss.k12oms.org/31-248744	NGSS Overview 9-12	December 10, 2024	8:00 - 3:00	WEST END
https://sbcss.k12oms.org/31-248744	NGSS Overview 9-12	February 11, 2025	8:00 - 3:00	BRIER

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SBCSS CAST IA Training for Teachers

OMS LINK	EVENT TITLE (OFFICIAL)	DATE(S)	EVENT TIMES	SITE
https://sbcss.k12oms.org/31-248732	How do I support all my 3-5 students with CAST Interim Assessments	September 3, 2024	9:00 - 3:00	DMESC
https://sbcss.k12oms.org/31-248732	How do I support all my 3-5 students with CAST Interim Assessments	November 12, 2024	9:00 - 3:00	WEST END
https://sbcss.k12oms.org/31-248732	How do I support all my 3-5 students with CAST Interim Assessments	January 7, 2025	9:00 - 3:00	DILC
https://sbcss.k12oms.org/31-248738	How do I support all my 6-8 students with CAST Interim Assessments	September 24, 2024	9:00 - 3:00	DMESC
https://sbcss.k12oms.org/31-248738	How do I support all my 6-8 students with CAST Interim Assessments	November 7, 2024	9:00 - 3:00	WEST END
https://sbcss.k12oms.org/31-248738	How do I support all my 6-8 students with CAST Interim Assessments	January 14, 2025	9:00 - 3:00	DILC
https://sbcss.k12oms.org/31-248739	How do I support all my high school students with CAST Interim Assessments	September 26, 2024	9:00 - 3:00	VIRTUAL
https://sbcss.k12oms.org/31-248739	How do I support all my high school students with CAST Interim Assessments	November 14, 2024	9:00 - 3:00	WEST END
https://sbcss.k12oms.org/31-248739	How do I support all my high school students with CAST Interim Assessments	January 9, 2025	9:00 - 3:00	DILC

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SBCSS CAST IA Training for TOSAS/Admin

OMS LINK	EVENT TITLE (OFFICIAL)	DATE(S)	EVENT TIMES	SITE
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for 3-5 Grade Admin/District Coordinators	October 3, 2024	9:00 - 12:00	DMESC
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for 3-5 Grade Admin/District Coordinators	November 19, 2024	9:00 - 12:00	WEST END
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for 3-5 Grade Admin/District Coordinators	January 21, 2025	9:00 - 12:00	DILC
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for 6-8 Grade Admin/District Coordinators	October 1, 2024	9:00 - 12:00	DMESC
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for 6-8 Grade Admin/District Coordinators	November 21, 2024	9:00 - 12:00	WEST END
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for 6-8 Grade Admin/District Coordinators	January 23, 2025	9:00 - 12:00	DILC
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for High School Admin/District Coordinators	October 10, 2024	9:00 - 12:00	DMESC
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for High School Admin/District Coordinators	December 3, 2024	9:00 - 12:00	WEST END
https://sbcss.k12oms.org/31-248705	CAST and CAST IA for High School Admin/District Coordinators	January 28, 2025	9:00 - 12:00	DILC

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Elaborate: STEM Ecosystem

Initiatives in Support of High Quality Science Instruction

Come Volunteer!

Bring Teachers/Science Fair Coordinators to Education Outreach Day!

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Evaluate: Measuring our Impact

Measurement of our Region 10 NGSS Vital Behaviors	Measurement of Local NGSS Vital Behaviors
Regional Measures	**Local Measures**

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

Mariano Aranda, SBCSS
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Yamileth Shimojyo, RCOE
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Cheryl Frye, RCOE
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951-660-9590

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Science Fair for Riverside and San Bernardino

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

Riverside Science and Engineering Fair
https://www.rcoe.us/about-us/superintendent/office-of-the-superintendent/community-engagement-and-partnerships/student-events/science-and-engineering-fair

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Thank you for attending and to La Brea Tar Pits for hosting

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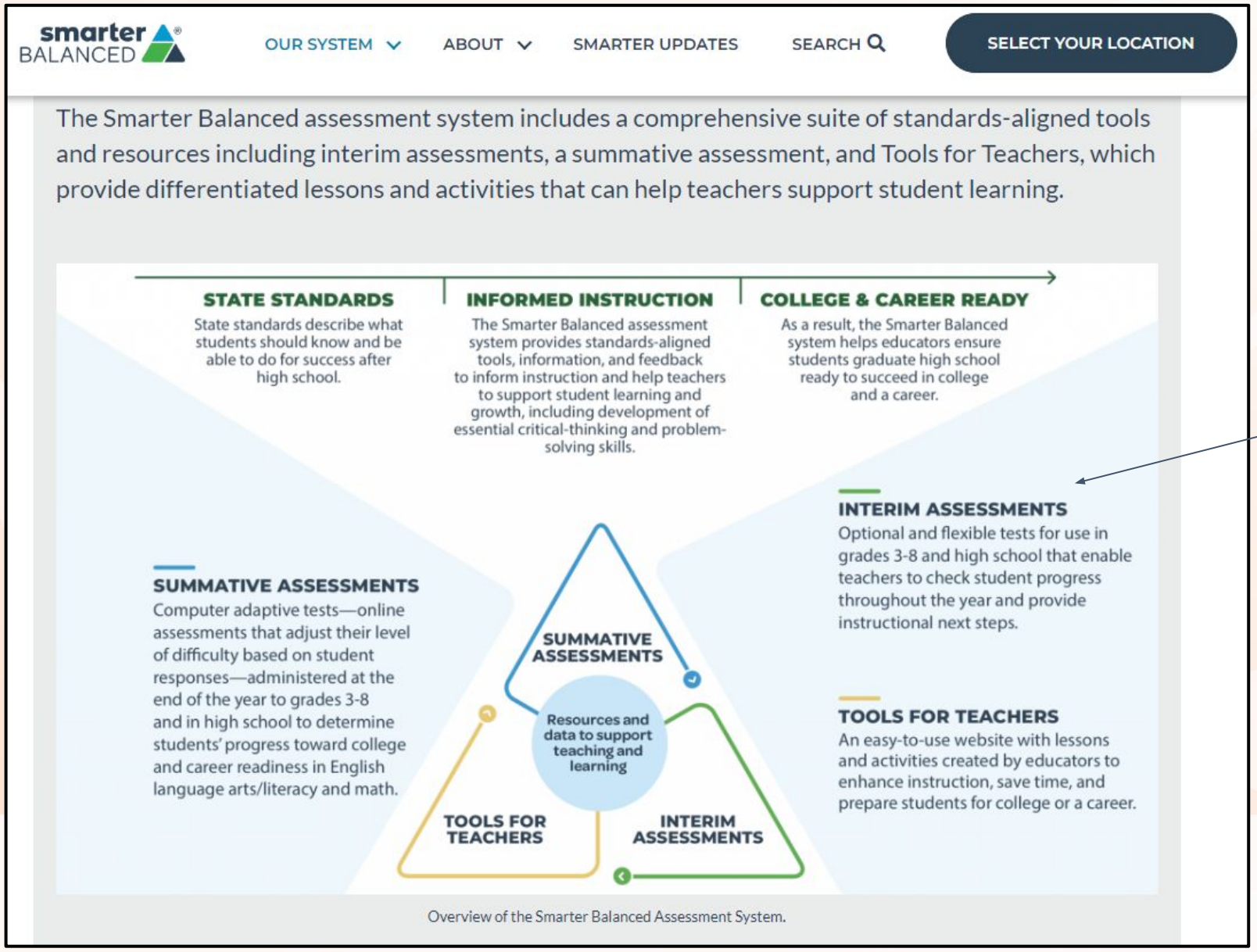
SBAC Assessment System

Collective Commitment ?

vital behavior



Overview of the Smarter Balanced Assessment System.

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Local Assessment Systems

Summative or Formative Assessment
District mandated Assessments such as: Benchmarks, Interim Assessments, i-Ready, IMAP, etc.

Formative Assessment
with grade-level & site collective commitments: writing, exit tickets, group work, vertical spaces, Interim Assessments, etc.

Formative Assessments
at the classroom level such as: student surveys & interviews, oral fluency, math thinking, small group, etc.

Satellite Data

At the district level, student data is part of the district picture where patterns and themes are identified. These summative or formative assessments are important to drive LCAP, professional learning and gaps in understanding. Every student/teacher data point is important when making district level decisions.

Map Data

At the school site level, instructional schedules can be created based on grade-level data. Teams of teachers can create collective commitments. Small group instruction is informed through immediate and targeted feedback.

Street Data

At the classroom level, formative assessments that capture student voice align with the Guidelines of Universal Design for Learning. Immediate instructional impact.

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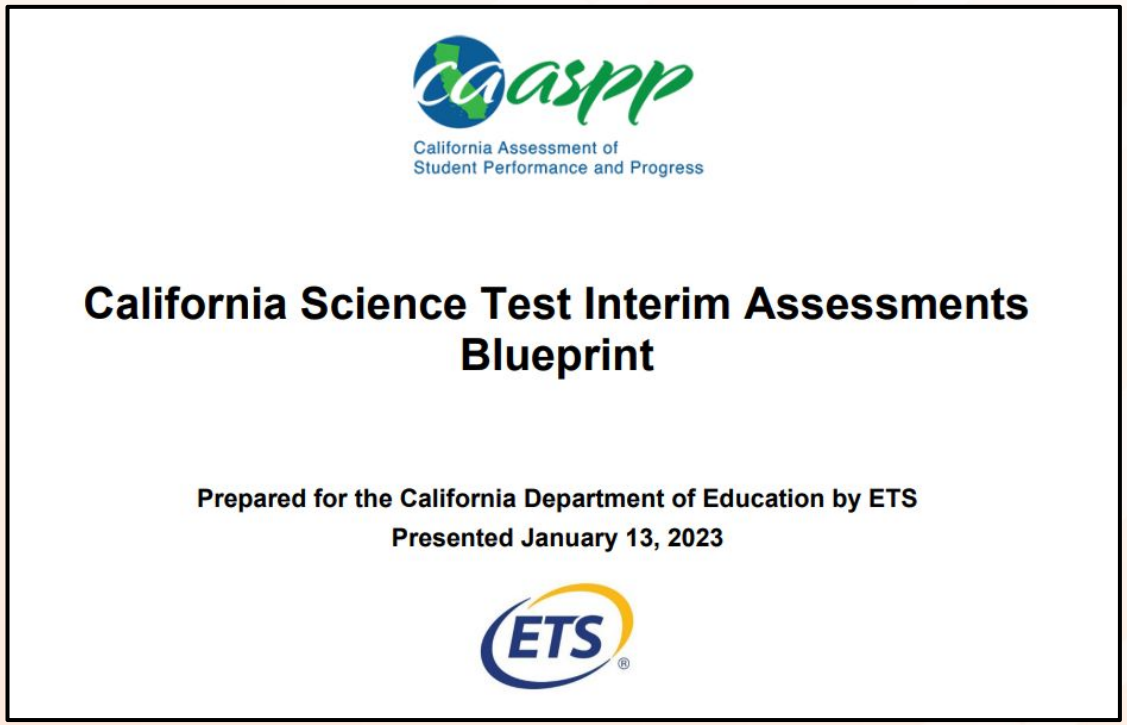
CAST Interim Assessments Blueprint

Suggested reflection prompts as you read:

1) What stands out to you?

1) What are the limitations for this year and what is projected for 24-25?

1) At this time, how do you envision the Science Interim Assessments being used?



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CAST Interim Assessment Training & Exemplars

Caaspp.org

Login to TOMS

Go to Resources Tab

Choose CAST IA Assessments