



Inyo County Office of Education
Barry D. Simpson, Superintendent

The Inyo Insight

An Education Newsletter from the Inyo County Office of Education

Volume 12, Issue 5

www.inyocoe.org

February 2020

California's Environmental Principles and Concepts - Not Just "One More Thing"

By Maggie Riley

Here in Inyo County, because of our "big backyard," most of us are well-aware of our relationships with the natural environment and the importance it plays in our lives. Whether through our abundant outdoor recreation opportunities, the tourism economy, ranching, farming, field work, or just enjoying the views on the way to school, our environment is "in our faces" much of the time. It's therefore not a big leap to connect classroom learning to the natural world for us, but... when teachers are adopting new curricula and adjusting teaching to new standards along with many other initiatives, adding California's Environmental Principles and Concepts

(EP&Cs) to our teaching can seem like just "one more thing" to add to the heavy load teachers already carry.

However, after attending NGSS Rollout 6 – Environmental Literacy, focused on the EP&Cs, we came back inspired to think otherwise! The EP&Cs are integrated with NGSS and the History-Social Science Standards, and will soon be integrated into other curriculum standards. This integrated approach gives teachers a lens through which to teach multiple disciplines and reach multiple standards simultaneously.

We are fortunate that getting students outdoors to learn is not hard in our

community! ICOE and many community organizations offer programs to help teachers get their students outside to learn. ICOE offers outdoor science programs for K-8, including gardening, ESWP, Taking Root, Trout in the Classroom, and Science Camp. Community organizations such as ESIA, ESLT, Friends of the Inyo, the Bishop Paiute Tribe, and others have created even more outdoor program opportunities. All of our schools are near natural areas that can become outdoor learning labs, and we have a plethora of scientists who are willing to work with our high school students on field projects as well.

Article continued on back



SCIENCE • TECHNOLOGY • ENGINEERING + ARTS • MATHEMATICS

Showcase 2020

April 30, 2020 at 4:30 - 7:30 pm
Tri County Fairgrounds

Contacts: mdoonan@inyocoe.org & itwomey@inyocoe.org

Please submit Intent to Participate (linked) by: February 18, 2020

Get Inspired with these STEAM Kits!

Enter our [raffle](#) to win one of these kits for your classroom:

Bristlebot Robotics Kit (suggested grade levels 3+)



A Bristlebot is a small robot made by combining a toothbrush head and a vibrating pager motor. Build a Bristlebot to teach basic engineering, motors, circuits, and balance principles. Bend, twist, and angle the chenille stems into different positions and see how it affects the movement and direction of your Bristlebot. This kit comes with everything you need to build 20 Bristlebots.

Tangrams Kit (suggested grade levels K-2, slightly used)

17 tangram sets and teacher resource book from ETA Cuisenaire. Tangram puzzles are an excellent tool for spatial visualization activities and are perfect for hands-on teaching of geometric shapes, congruence, symmetry, and much more!

Moving Creations K'Nex Kit (suggested grade levels 2-8)

Students can apply STEM principles just like an engineer!

The step-by-step illustrated guide contains 9 different builds (pneumatic and hydraulic), educational science content, 18 STEM experiments and "Think Bigger" challenges to practice the scientific method.



STEM Challenge Cards (suggested grade levels 1-6)

Each card features a simple challenge for students to complete using everyday items. Back of each card includes a tip for students struggling to get started or complete the challenge, a simple explanation of the science concept involved, and an extension question for each area of STEAM.

California's Environmental Principles and Concepts *continued*

Annie Ransom, a teacher from Ventura County, wrote a wonderful article about this (linked [here](#)) that I highly recommend – she stated, “I began to see, through my students’ experiences that the EP&Cs and environmental literacy were actually making my life easier. It was the missing link I had been looking for to completely integrate my lessons together with purpose and relevance for my students.”

Indigo Johnson, Math and Science teacher

from Big Pine High School, said, “Going to the rollout offered a great opportunity to see how other educators were thinking about and applying NGSS, which allowed me to think about science education in a broader context.” I asked her if she saw herself being able to use Environmental Literacy and the EP&Cs as a tool for engagement, or an integrating context for the rest of curriculum. Her answer? “I think it's impossible to do NGSS without it.”

For more information about outdoor programs offered by ICOE, contact Maggie (mriley@inyocoe.org) and to view the materials shared at the NGSS Rollout 6, [click this link](#).

If you would like to schedule a staff or small group workshop, please contact Mini at mduonan@inyocoe.org.



Fill the Silence with Productive Talk

By Ilissa Twomey

When I first started teaching, a colleague shared that while undergoing a formal evaluation, the administrator was pleased with the quiet level of the classroom...so pleased that the administrator fell asleep! Many of us began our careers with the perception that a quiet classroom was a well-managed one, where if the students were quiet then we knew they were either absorbing all the great information we were bestowing or working diligently on some important task. Fast forward to the era of Common Core Standards and 21st century skills...where students are expected to collaborate, build understanding and facilitate their own learning. Many of us struggle with how to get to that point where student collaboration is productive and meaningful. Susan O'Brien, Instructional Coach and *Edutopia* author, advises that *teaching* students to talk productively is a step towards the goal of true learning and collaboration. “Building the routines takes time, but in the long run it saves time by engaging students and making the time much more productive,” states O'Brien. O'Brien explicitly taught her students to use sentence stems and question prompts designed to elicit more from responses, challenge one's thinking, ask for evidence, rephrase an idea, and to simply agree or disagree with each other, claiming productive talk as the most important adjustment to her practice. Interested in incorporating this productive strategy into your practice? Check out these resources:

[Complete Edutopia article by O'Brien](#) - including a link to a [Productive Talk Bulletin Board](#)

[Encouraging Academic Conversations With Talk Moves](#) or [Engaging ELLs in Academic Conversations](#) (videos)

[“Procedures for Classroom Talk”](#)

Speaking and Listening Standards: [K-5](#) or [6-12](#)

Free Professional Learning Opportunity: Science Discourse in NGSS

K-5 teachers and administrators

Wednesday, April 22, 2020, 8:30am - 3:00pm
Tallman Pavilion at the Tri County Fairgrounds
Continental breakfast & lunch provided
Sub cost reimbursement available

Register here: <https://bit.ly/2U6bbLb>

Join us for a hands-on 3D learning experience that shows how science discourse can be a powerful tool for developing conceptual understanding of science phenomena. Together, we'll examine practical strategies for creating discourse-rich science classrooms that enable all students to engage in collaborative conversations. View the [flyer](#) for more information.

Please contact Ilissa Twomey at itwomey@inyocoe.org with questions.



Save the Dates!

POETRY OUT LOUD

FEBRUARY 5, 2020

9th-12th Grades

Inyo Council for the Arts

SPELLING BEE

FEBRUARY 12, 2020 AT 5:30PM

4th-8th Grades

Jill Kinmont Boothe School

SPEECH CONTEST

MARCH 12, 2020

6th-8th Grades

Jill Kinmont Boothe School

COLLEGE AND CAREER DAY

APRIL 7, 2020

5th Grade

Cerro Coso College, Bishop

STEAM SHOWCASE

APRIL 30, 2020

4:30 - 7:30PM

K-12th Grades

Tri-County Fairgrounds

Cooking, Culture, and Coming Together
Inyo County Community Reads 2020

Our 12th annual program kicks off March 13th!
Visit inyo.org/CommunityReads for more details