

# A Moment of Science from ISTA

Idaho Science Teachers Association President's Newsletter

November 2021



## A Word (or two) From Your ISTA President!

Fall colors are on the trees and the thermometer is slowly dropping as we head deeper into autumn! The end of October brought with it an opportunity for Neva Telford (recent past president from Madison) and myself to attend the regional NSTA conference in Portland. We snagged a bunch of great information that we will be passing along to our members! We also had a chance to get some perspective on hosting a face-to-face professional conference in the wake of the pandemic. Neva is chasing several leads for great keynote speakers, presenters, and vendors to participate in our September 2022 ISTA/ICTM conference in Pocatello next year! One of the best things to come out of my conference experience was a chance to network with the leadership of NSTA and our local associations. I met the NSTA president, Dr. Eric Pyle and we chatted about the role of professional organizations in the 21st century. I met the region XV NSTA regional director, Leslie Urasky and we chatted about ways to have Wyoming, Montana, and Idaho share resources and collaboratively create content for our members. I met the Washington Science Teachers Association past president, Dr. John McNamara and we chatted about how Washington would love to share some reciprocity in conference events with us.

I am excited about the opportunities that the ISTA has this year to rethink who we are and what we bring to our members. We will continue to focus on professional development in the form of our yearly conference but I think that we may rise like a phoenix from the ashes of the last few years and grow

our membership as we provide services and products that are relevant to science educators across our state!



## Open Board Positions

We are currently going through some transitions on our board of directors and we are looking for some regional representatives. If you know of someone who might be a great fit for our board OR you personally are interested in stepping into a leadership role, please reach out and we can chat!

District 3: Adams, Washington, Payette, Gem, Canyon, and Owyhee

District 4: Blaine, Camas, Gooding, Lincoln, Cassia, Minidoka, Twin Falls, and Jerome

District 5: Bear Lake, Franklin, Oneida, Power, Bannock, Caribou, and Bingham



# IDAHO'S **BIGGEST** STEM SALE

Give  
the  
Gift of  
**STEM**



504 S 11th St Boise, ID

Friday, November 12

Saturday, November 13

Sunday, November 14

9am - 4pm



**Your One-Stop STEM Shop  
For the Holidays!**

## Phenomenon-Based, Literacy-Rich Learning Using Digitized Museum Objects

Are you looking for a digital tool that will allow your students to engage with museum objects to do standards-lined, phenomenon-based instruction with your students? Well, the Natural History Museum of Utah has you covered! Check out [this great collection](#) of resources aimed at 6-8th grade students (could be stretched 4-9th) that let's students collaboratively explore scientific process and create evidence-based arguments.

The simulation that I explored had students looking at 3-D digital dinosaur bones in a viewer and then using the clues that they found to determine what type of bone each one was and what kind of dinosaur it belonged to. Students are asked to identify different types of evidence, like weak evidence, strong evidence, and disconfirming evidence. This particular simulation would also work well in an English classroom as students work on strengthening their argumentative writing!

Each lesson comes with videos that walk your students through the exploration process, teacher guides, standards alignments, and digital student data note books in both PDF and Google Docs formats (these student guides can also be printed off if you want to roll old-school!).

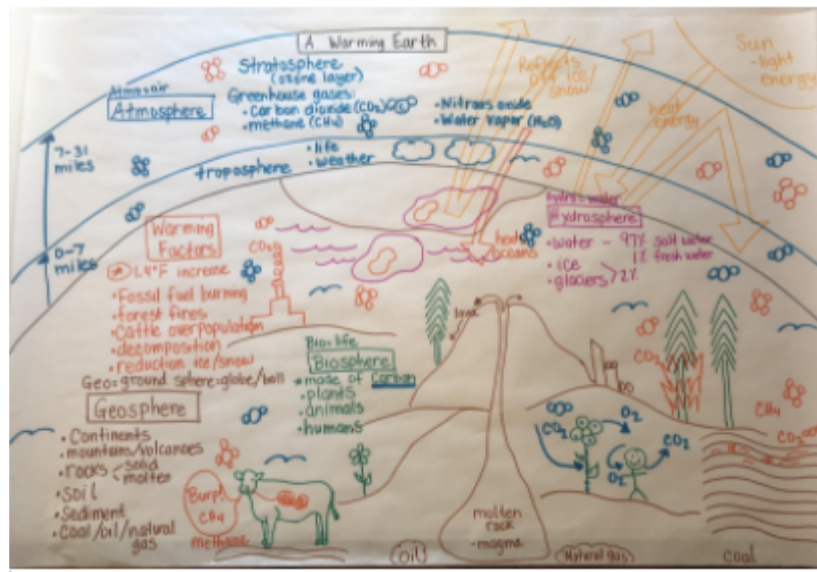
You will have to create a teacher login to access the materials but the accounts are free and the registration process is fast and easy!





## Voices of Hope: A GLAD Climate Unit

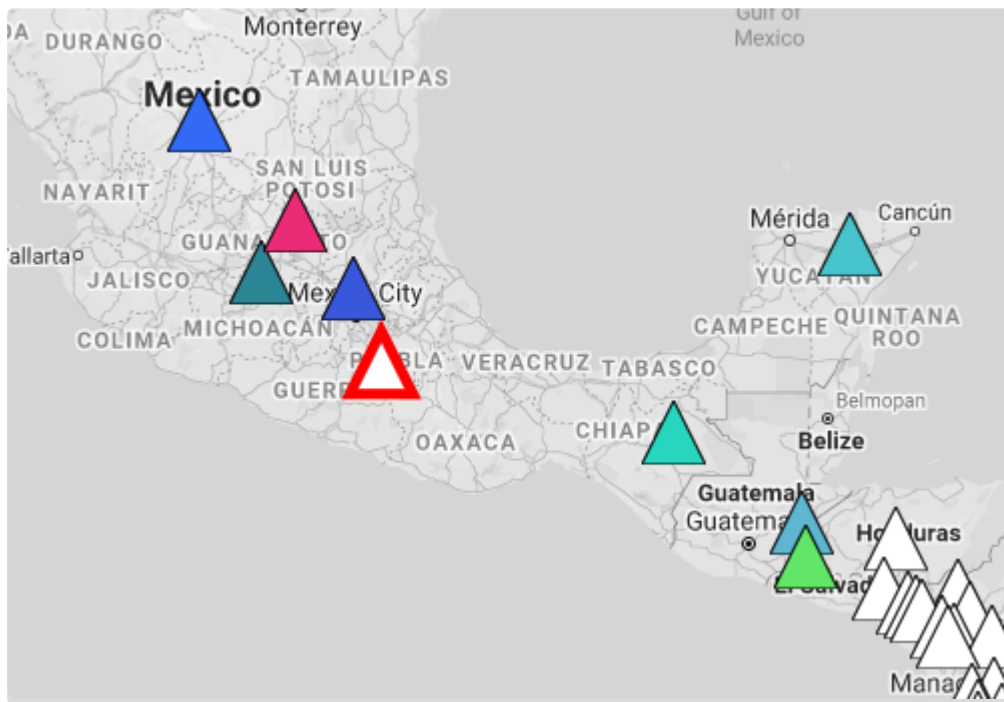
Some of you are probably familiar with GLAD units as a series of strategies designed to allow for guided language acquisition. While these units are great for English Language students, they are also great for students who are struggling with vocabulary and language skills. Normally, you must be specially trained to access and teach GLAD strategies but because of a special grant from Washington State's ClimeTime program, Kate Lindholm was able to create a unit based around climate science that is available to any teacher that wants it. Check out [this link for access to this unit](#). Students will learn the science behind climate change, and then create a call to action to make a positive impact on our planet.



## Authentic Earthquake Location Simulation from IRIS

How many of you are having your students calculate the epicenter of an earthquake using the S-P time method and then using three pieces of data to triangulate the location of that earthquake? According to seismologist Tami Bravo from IRIS, this is a very dated method of epicenter location that has not been commonly used by seismologists since the 1960's. She also mentioned other issues with this commonly used technique including the fact that it relies on fake data since S and P waves do not move in the same plane of motion, the fact that it places too much emphasis on the three circles overlapping at a single point which almost never happens, and it does not take advantage of student excitement because it relies on data from old earthquakes rather than ones that have recently happened.

With all of this in mind, IRIS just released an online simulator called [EqLocate](#) that has students use a more current and more authentic method of location called Perpendicular Bisector Location. (The website will eventually also have an S-P time locator simulation as well as an even more authentic method called Residue Minimization but those have not been fully built out yet.) Students will follow easy-to-use directions, interact with recent earthquake data, and determine the most likely epicenter location for a series of worldwide earthquakes.



## Exploring by the Seat of Your Pants

Every month during the school year, [EBTSOYP](#) hosts up to 60 live, virtual events for classrooms.

They also host full day, week and month long events covering themes like conservation, biodiversity, women in science, space exploration, ocean plastics, engineering, climate change, ecosystems, technology and much more.

They work with organizations, institutes and facilities around the world, and host hundreds of individual scientists and explorers. They are proud to host a large number of female scientists and explorers as well as a strong representation from minority communities so all students can see themselves in these exciting STEM careers!



# Intro to Coding For Idaho Elementary Teachers

Celebrate Computer Science ED Week by participating in [Intro to Coding for Idaho Elementary Teachers](#) sponsored by the STEM Action Center and Micron

November 16th 4:00PM - 5:00PM MST

In this interactive workshop, learn to integrate coding into the classroom for CSEdWeek and throughout the year, regardless of your previous coding experience.



## i-STEM Strand Providers Needed -- Apply Today!

Want to share your STEMazing knowledge with Idaho educators? [Apply to be a strand instructor at i-STEM 2022!](#) The Idaho STEM Action Center is looking for passionate leaders to teach 4-day strands (workshops) at the i-STEM institutes. Institutes take place the last two weeks of June at six locations across the state. Consider sharing your great ideas with science educators from all over Idaho!

*The application will be open October 15 through December 1, 2021.*







## Dr. Melyssa Ferro

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2021-2022

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