Resources from the 2023 OSTA Conference

These resources were gathered and shared by Noyce Scholars who attended the conference and participated in the associated 2023 WRNN Noyce Networking Event

Funding:

https://www.diackecology.org/applying-for-a-grant (Oregon)

Here is the link to the Diack website, where you can apply for up to \$2,000 to fund student-lead research.

Learning Resources:

Engineering

https://www.societyforscience.org/isef/ Here is the link for the International Science and Engineering Fair website.

https://jumpshare.com/b/6pAoX8eWOGbrjwjDde3w

Amplify Science Resources - Developing Future Engineers session materials. Includes program descriptions, reflections templates, SEP bookmark printouts, etc.

<mark>Science</mark>

https://www.tttpress.com/osta.html Physical Science Mystery Tube Activity

https://tieseducation.org

The main website for the Teacher Institute for Evolutionary Science. If you go to Teacher Materials under the Menu button it will take you to where you can look at lessons, videos, and games.

https://lacuknos.oregonstate.edu

https://drive.google.com/drive/folders/1uUAmmmQIDRdk7jOcAn2LBL444kF9_3BL?usp=sharing https://bit.ly/3rsyazs

The main project page for the LaCuKnoS (Language, Culture, Knowledge, and Science) from OSU is helping teachers statewide to tap into student's culture and help them to acquire knowledge of science through academic language supports. The website provides many lesson ideas that were developed for SMILE clubs and are now being adjusted for classroom application as well. Also, includes cross-laminated timber lesson along with others.

https://www.openscied.org/

Free lesson plans by OpenSciEd which have been reviewed and refined over an 18th month process to adhere to the NGSS.

https://tieseducation.org/

Teacher Institute for Evolutionary Science show how organisms are all connected/tree of life https://sciencesaves.org/teacher-resources

Ready-made lesson plans related to evolution.

https://evogeneao.com/en

A really cool tree of life interactive website.

https://everfi.com/

FREE digital lessons on STEM, SEL, Financial education, and more.

https://www.shakealert.org/messaging_toolkit

Stake Alert. Resources and lesson plans for students to learn about earthquakes and how we measure them. They also provide resources for having you school to have a Stake Alert system installed.

https://docs.google.com/presentation/d/1tV_13mYRr49JwjGl0ZQqUhA7wB4LWX0qJg2B373qpKI/edit#sli de=id.p1

ODE Oregon Science Update Slides - information on upcoming dates/deadlines, updates to state science assessments, and STEM Hub initiatives.

https://oregonforests.org/sites/default/files/2017-05/OFRI_essaybooklet_gr7-12_WEB_0.pdf Essays Oregon Forests and Wildlife.

https://www.pivotinteractives.com

This website utilizes videos to help students explore concepts. The videos are paired with deep questions and interactive diagrams. The videos also are not like YouTube but are, rather, tailored for students to make observations and explain the concepts being taught.

https://stileapp.com

Stile is a new online platform that was developed in Australia. They have lessons aligned with NGSS and adjusted for the US. Each unit is based on an interesting driving question that most students will be intrigued by. The lessons are fully editable with opportunities to add media, documents, and links for students to explore. Teachers can personalize and differentiate as they wish.

www.padlet.com/mishahann

The padlet has links to blank and sample lesson plans as well as a link to Savaas, Elevate Science which is a resource with a teacher toolkit, but I believe it is part of the curriculum at the school where Misha is at.

https://www.shakealert.org/education-and-outreach/educational-resources Click on ""Educational Resource"

Biology

https://www.visiblebody.com/teaching-anatomy/biology Virtual biology technology (3D models)

Geology

https://www.youtube.com/channel/UC4szl4Ra1ZD3m80wJP40UBA

This is the YouTube page for Nick Zentner. He's a geology professor at Central Washington University. His channel has geology talks of all lengths and difficulties.

<mark>Food</mark>

https://www.foodagscied.org Food and Agriculture Center for Science Education Lessons.

https://www.ift.org/community/educators

Food Science Education Resources.

https://www.ift.org/community/educators/k12-teaching-resources More Food science resources and curriculum.

Coding

https://girlswhocode.com/ Girls Who Code - get a free coding club started at your school.

https://tinyurl.com/yrtmyftx

Coding with Vernier

https://docs.google.com/presentation/d/e/2PACX1vSXx4Mf9DtXKF84qPFtOUntbNZzrDhWxCVPaR_KcK0t Np-vRFxm1TrqagSe9Tj4pKrFyWtJesWRoGj/pub?start=false&loop=false&delayms=3000 OSTA 2023 - Bringing Circuits and Code together with Arduino and Tinker CAD Circuits

Chemistry

https://docs.google.com/document/d/1czusiSOLuldOitJG9kYb0Oe9bazJwEWaTlQXFmTo3Zg/edit?usp=sh aring

Document for Unit 2 in the NGSS Chemistry Curriculum. Includes the battery lab that we did at the conference.

<mark>Art</mark>

https://drive.google.com/drive/folders/1Ks-9f_uUylC_wdOYNiiiYLjKT9ArIXdD?usp=drive_link Graffiti Art folder ... making data intro.

https://www.environmentalgraphiti.org/all-series/tag/Lessons+from+History Website for Environmental Graphite, the art, and data collaboration

https://www.environmentalgraphiti.org

This is the Graphite artists page that has her art and the data along with it. Using her images, you can create a mini lesson for students to mirror her process and use data to form art! "

<mark>Forms</mark>

https://pdnetworks.soesd.k12.or.us/public/events/view-event/10367 Sign up for Professional Development Opportunity for 3rd to 8th grade teachers in any subject area.

https://docs.google.com/forms/d/e/1FAIpQLSc9dQ5Bjo9LWP3uDKuYcI3lxmS9qWS2XbI8B1v2pr1nhZM3J Q/viewform

Brad Fulton's Blog, Leader in Mathematics sign up form.