CEETEP – Related Digital Resources

The resources on the CEETEP DVD and website http://ceetep.oregonstate.edu/ include many items developed by or in collaboration with other organizations. Here we overview some of the partner and related organizations so you can access them directly.





1. IRIS – Integrated Research Institutes for Seismology

http://www.iris.edu/hq/programs/epo. In particular <u>Animations</u>
(http://www.iris.edu/hq/programs/education_and_outreach/animations) on plate

tectonics, seismology, GPS, earthquakes, and tsunami are added periodically (many of the best existing ones are on your CEETEP DVD and USB drive).

We will sign you up to receive <u>IRIS Earthquake Teachable Moments</u> <u>http://www.iris.edu/hq/retm</u>. These are earthquake notices send out within 24 hours of all significant earthquakes. Let your colleagues know so they can sign up too.



2. UNAVCO – runs the >1100 GPS stations for EarthScope

Find your closest GPS station using the <u>Plate Boundary Observatory (PBO) network</u> map (<u>http://www.unavco.org/instrumentation/networks/status/pbo</u>) Zoom in and then click on station of interest. A small box will open up. Click on the station name (blue) to go to the station website with data and photos. The data itself is in next to "Time Series Data:" and you would want "NAMO8 CVS" (blue).

A variety of resources are at http://www.unavco.org/education/resources/resources.html. UNAVCO also has a Velocity Viewer (http://www.unavco.org/software/visualization/GPS-Velocity-Viewer/GPS-Velocity-Viewer.html) that shows velocity arrows, but not all the stations show automatically. You can select at the bottom to see all, but it is better to do after you zoom into the general area of interest.

Teachers on the Leading Edge

3. TOTLE - Teachers on the Leading Edge

(https://wordpress.up.edu/totle/) was a previous K-12 teacher professional development program funded by EarthScope for Pacific Northwest. Great place to point colleagues to if you want to point colleagues towards resources. In particular, if you cannot take your learners into the field but still wish to show them what is seen in the field, there are Virtual Field Experiences
(https://media.up.edu/Physics/TOLE/VFEs/a_TOTLE_VFE.swf) for Oregon and Washington tsunami sites. Niawiakum River, WA site #4 has great "three-layer-cake". Copalis, WA #4 has ghost forest. (VFEs are also on your TOTLE DVD.)

4. Red Cross Emergency Planning Guide

Resources to develop an emergency plan for your family or workplace.

http://www.redcross.org/prepare

5. Readiness and Emergency Management for Schools (REMS)

A wide variety of school readiness resources (http://rems.ed.gov/) including TeenCertEnhancingSchoolEmergMgrment.aspx).

6. Lincoln County Schools, School Safety

Lincoln County SD and taken a very proactive approach to safety. Their <u>School Safety site</u> (http://www.lincoln.k12.or.us/dept_programs/safety.php) includes district Emergency Plan, Safety Videos, Family reunification and much more.

7. SCEC – Southern California Earthquake Center

SCEC (http://www.scec.org/) is funded by the National Science Foundation and the USGS to develop a comprehensive understanding of earthquakes in Southern California and elsewhere, and to communicate useful knowledge for reducing earthquake risk. SCEC is part of the Earthquake
Country Alliance (http://www.earthquakecountry.org/), a public-private partnership of people, organizations, and regional alliances that work together to improve preparedness, mitigation and resiliency.

8. SHAKEOUT EARTHQUAKE DRILLS

Great ShakeOut (http://www.shakeout.org/) Earthquake Drills are an annual opportunity for people in homes, schools, and organizations to practice what to do during earthquakes, and to improve preparedness. A collection of ShakeOut-related visualizations http://visservices.sdsc.edu/projects/scec/).

SHAKY GROUND 9. RCTWG – Redwood Coast Tsunami Workgroup

RCTWG (http://www2.humboldt.edu/rctwg/) is an interagency group working to reduce earthquake and tsunami hazards and coordination mitigation activities on California's North Coast. It has been a leading organization in grassroots action and initiated the development of the Living on Shaky Ground resources (http://www2.humboldt.edu/shakyground/).

10. PNSN – Pacific Northwest Seismic Network

PNSN monitors the occurrence of Episodic Tremor and Slip (ETS) events throughout Cascadia. You can see <u>maps of tremor</u> (http://pnsn.org/tremor) on their site. Use the sliders at the bottom to pick the period of interest. In order to follow the PNSN commentary about a given episode, visit the <u>event overview and blog page</u> (http://pnsn.org/tremor/overview).

11. USGS - United States Geologic Survey

Earthquake Hazard Program has information about and maps of earthquakes around the world. Did you feel it? (http://earthquake.usgs.gov/earthquakes/dyfi/) —

if you feel an earthquake, input data about the shaking you felt there. This is valuable citizen science that helps USGS research correctly model expect shaking for future quakes. <u>Earthquakes for Kids</u> has activities (http://earthquake.usgs.gov/learn/kids/).

12. NOAA – National Oceanic and Atmospheric Administration

NOAA (http://www.tsunami.gov/) runs the tsunami warning system for the USA. Thus distant tsunami warnings come through the NOAA warning system as well as educational resources. NOAA also has a Tsunami Travel Time calculator that estimates how long a given tsunami source wave will take to reach other parts of the same ocean basic (http://maps.ngdc.noaa.gov/viewers/ttt_coastal_locations/).

13. Resources for children (particularly for younger children)

- FEMA Disaster Master (http://www.ready.gov/kids/games) and Emergency Backpack activities
- FEMA Helping Children Cope with Disaster (http://www.ready.gov/kids/parents/coping)
- <u>FEMA Tremor Troops</u> has great activities (somewhat dated) that TOTLE has built off of (http://www.fema.gov/media-library/assets/documents/2915)
- <u>USGS Earthquakes for Kids</u> has a variety of earthquake activities/info (http://earthquake.usgs.gov/learn/kids/)
- <u>Tsunami Teacher USA</u> is a basic NOAA video that includes the mayor in the American Samoa community who helped his village evacuate (https://www.youtube.com/watch?v=tUN_UTYOGNo)
- <u>Tsunami: Know What to Do</u> NOAA cartoon with crabs learning about tsunami and preparedness (<u>https://www.youtube.com/watch?v=UzRORt3i4kc</u>)
- Tommy Tsunami & Ernie Earthquake coloring book (http://www.tsunami.noaa.gov/pdfs/tommy_tsunami_coloring_book.pdf)
- Tsunami info worksheet (http://www.tsunami.noaa.gov/docs/Tsunami-Trivia.pdf)
- NOAA Kids Hazard Quiz (http://www.ngdc.noaa.gov/hazard/kgStart.shtml)

14. Tsunami vertical evacuation structures FEMA

https://www.fema.gov/media-library/assets/videos/79474

15. Videos on liquefaction

- Liquefaction video from Japan water pouring from cracks (https://www.youtube.com/watch?v=I3hJK1BoRak)
- What is liquefaction? from New Zealand (https://www.youtube.com/watch?v=j-hyOwsl_NY)



16. MyHazards CalOES

MyHazards is a tool for the general public to discover hazards in their area (earthquake, flood, fire, and tsunami) and learn steps to reduce personal risk. http://myhazards.caloes.ca.gov/