David V. Black American Academy of Innovation

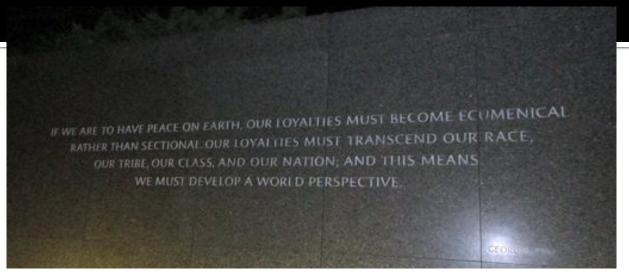
elementsunearthed@gmail.com



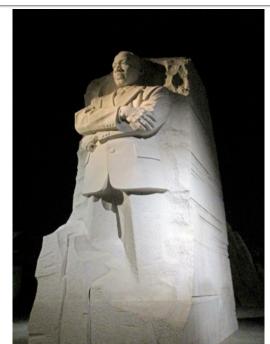
Global Education Through Digital Technology



What is Global Education?



Goes beyond "Multiculturalism"



Global citizenship:

- A way of living that recognizes our world as a complex web of connections and interdependencies.
- Someone who identifies with being a part of an emerging world community and whose actions contribute to building this community's values and practices.

Global Awareness

 Understanding of world issues (social, environmental, political, economic) from multiple cultural perspectives.



- Opposite of isolationism, parochialism, and nationalism.
- Especially important in an increasingly globalized economy.



Global Competency

- Globally competent people:
 - Investigate the world.
 - Recognize multiple perspectives.
 - Communicate ideas.
 - Take action locally to solve global problems.



Teachers for Global Classrooms

- Program of the U.S. Department of State's Bureau of Education and Cultural Affairs.
- Deadline: March 20 get cracking!
- Any subject area or grade level.
- Chosen as education ambassadors to visit a developing country for 2-3 weeks.
- Exchange program: Teachers from the country host U.S. teachers in their home villages and classrooms.



TGC Requirements

- Chosen to travel to one of six countries.
- Take ten week intensive online course.
- TGC Symposium in Washington, D.C. in February.
- Develop a global lesson plan in your content area.
- Capstone project website/ blog.
- Research question.
- Travel and follow-up, further grants.



Research Questions

- In what ways do humans from a variety of cultures share a common humanity?
- Love, humor, play, loyalty, friendship, kindness, sharing, charity, dance, music, art, etc.
- Science questions: Our common stars – Latitudes and Attitudes.







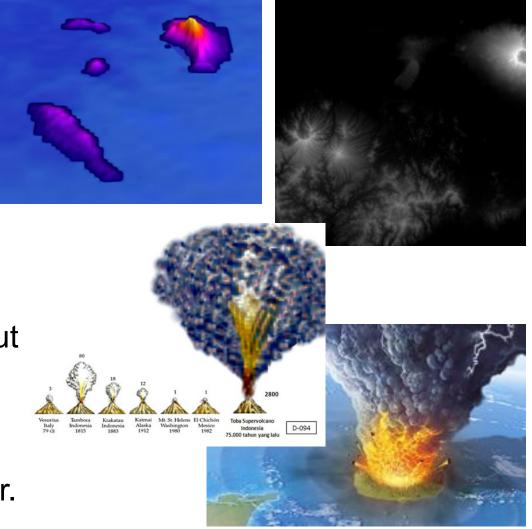
Volcano Variety: Anak Krakatau & Gunung Tambora

 Krakatoa exploded in 1883, killing at least 72,000 people.

 Anak Krakatau, the "Child of Krakatoa" is rising from the sea floor.

 Gunung Tambora exploded in 1815, creating the Year Without a Summer.

 Gunung Toba exploded 74,000 years ago and created a six-year winter.



Global Technologies: Investigating the World

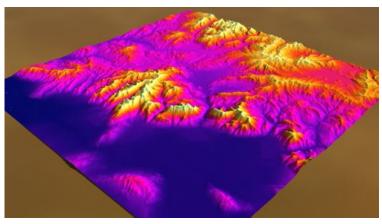
 Volcanic landforms through digital elevation models (DEMs).

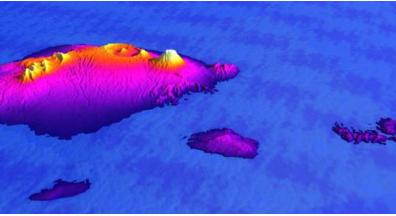
Can do any area of the world from 60° North to 60°

south.





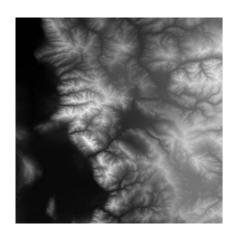




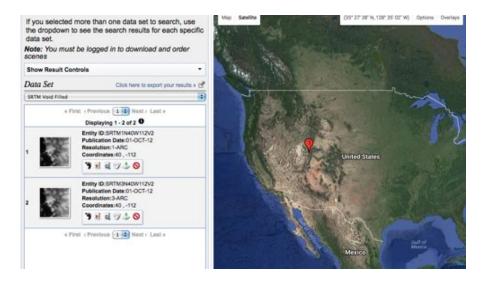
Earth Explorer

https://earthexplorer.usgs.gov/

- Several data types available, including Shuttle Radar Topography Mission (SRTM) data.
- Easy to search for by name or coordinates.
- Download grayscale file.
- Use in 3D modeling software as a terrain height map.







Global Technology: Recognizing Perspectives

- Creating infographics using Piktochart or other online tool.
- Using ThingLink to create interactive hot spots.
- https://www.thinglink.com/scene/853070881360969730#
- Observatory Site Selection Unit: Building a new observatory on Mauna Kea.

Understanding The Thirty Meter Telescope Controversy



http://www.world-newspapers.com/



Global Technology: Communicate Ideas

- 101 Web 2.0 tools:
 - http://oedb.org/ilibrarian/101-web-20-teaching-tools/
- PowToons: https://www.powtoon.com



Student Videos

- If possible, it would be good to communicate directly with other classrooms around the world using Skype, Adobe Connect, Zoom, etc.
- However, they may be on the other side of the world or not even in session.
- So creating asynchronous videos may be best – post to blogs or YouTube, etc.
- Personal student greetings and daily lives, with captions.



Global Technology: Take Action

- Collaboration between classrooms to look at local solutions to global problems.
 - Example: Potable water issues.
 - Students as problem-solvers.
 - 21st Century Skills.
- Data gathering and analysis:
 - Example: Simultaneous weather/climate data.
 - http://worldweather.wmo. int/en/home.html
- Sharing cultural perspectives building bridges of mutual respect and understanding.



Other Global Opportunities

- National Geographic Grosvenor Fellowship: Two weeks aboard a research vessel.
 - http://www.nationalgeographic.org/education/programs/grosvenor-teacher-fellows
- Joides Resolution Onboard Education Officer:
 - http://joidesresolution.org/ node/453
- Goethe Institut Transatlantic Outreach Program:
- https://www.goethe.de/ins/us/en/spr/eng/top.html
- Fullbright Scholarships to teach overseas.