Q & A

Teaching Resources #90429
What are some useful teaching resources? (include link where appropriate)

Sort by Count Expand all Collapse all Nest categories Show response in one category Show discuss only

73 responses from 40 authors

Online resources (15)

- Carl wieman science education initiative http://www.cwsei.ubc.ca/
- Gis 4 geomorphology (http://gis4geomorphology.com/)
- Hhmi resources: http://www.hhmi.org/biointeractive/ -- Edward_Davis
- Http://serc.carleton.edu/nagtworkshops/geochemistry/index.html
- I f$@ing love science
- I've used google images to find good websites with other peoples online lectures
- Iris usarray ground motion simulations are amazing for showing how earthquake waves move: http://www.iris.edu/dms/products/usarraygmv/
- Online text for remote sensing: http://nature.berkeley.edu/~penggong/textbook/
- Sepm strata website for teaching stratigraphy http://www.sepmstrata.org
- There are many useful video on youtube for teaching geosciences (www.youtube.com).
- Tomorrow's professor mailing list: http://cgi.stanford.edu/~dept-ctl/cgi-bin/tomprof/postings.php
- Visible earthquake (http://earthquake.visiblegeology.com/)
- Www.opentopography.org - great portal to free high-resolution lidar topography datasets (in variety of formats including shaded kmzs). very good for small research projects or for showing off lidar data in class.
**Course resources** (11)

- Climate communication: http://guide.cred.columbia.edu
- Google image search (great for finding examples so show in class)
- On the cutting edge resources!
- Online syllabi and course materials
- Science sites of the week by mark francek (central michigan univ)
- Textbook authors who post power points (winter for igmet pet)
- Ucmp understanding science website: http://undsci.berkeley.edu/  
  -- Edward_Davis
- Unavco educational resources (http://www.unavco.org/education/resources/educational-resources/educational-resources.html)
- Visible geology is a cool intuitive way to show students 3-d relationships: app.visiblegeology.com/
- William white (cornell) geochemistry lecture notes http://archive.today/tzcma
- Youtube

**Geosciences** (9)

- Colleagues
- Connect it to pop culture. teaching about volcanoes? start with "pompeii" by bastille.
- Gsa dnag field guides for planning field trips
- Http://serc.carleton.edu/index.html
- Iri scientific data library plotting tool tutorial - great for getting (advanced) students into the trenches plotting and manipulating gridded data (e.g., climate data): http://iridl.ldeo.columbia.edu/dchelp/tutorial/
- My favorite stereonet web app showing 2d and 3d: http://app.visiblegeology.com/stereonetapp.html
- Serc website
- Visible geology (http://visiblegeology.com/)
- Website for online remote sensing course  
  http://www2.geog.ucl.ac.uk/~mdisney/teaching/geogg141/geogg141.html
**Course design** (7)
- Cutting edge course design tutorial 
  http://serc.carleton.edu/nagtworkshops/coursedesign/tutorial/index.html
- Earthviewer app from hhmi http://www.hhmi.org/biointeractive/earthviewer
- Itunes-u for ideas from posted video lectures (e.g. hooks, organization, questions to ask)
- Other people's syllabi
- University-sponsored workshops (or fellowships!)
- Your colleagues who have taught the course before
- Your institution's teacher leaning center

**Climate education** (6)
- Http://serc.carleton.edu/climatechange/index.html
- Knmi climate explorer - for accessing and plotting various climate datasets: http://climexp.knmi.nl/start.cgi? id=someone@somewhere
- Nws warning decision training branch online courses (not just for forecasters!) www.wdtb.noaa.gov
- Teaching resources for climate education.  
  http://cleanet.org/clean/educational_resources/index.html 
  -- Nicole LaDue
- The serc website!
- Ucar meteorology education resources (www.meted.ucar.edu)

**Teaching** (4)
- Center for teaching and faculty development
- Colleagues
- Learner-centered teaching 
  (http://www.amazon.com/learner-centered-teaching-five-changes-practice-ebook/dp/b00b89qxsu/ref=sr_1_1?
  s=books&ie=utf8&qid=1403726054&sr=1-
  1&keywords=learner-centered+teaching) 
  -- Amy Hixon
- Random thoughts:the humanity of teaching by louis schmier

http://www.qa-umd.appspot.com/results/90429
Active learning (3)

- Have students fill out an index card on a topic: what do you know (or think you know), what do you want to learn.

- Minute evaluations at end of each class. give an overall rating for the class, clearest, fuzziest, more info needed.

- Noaa's earth system research lab has an online tool for simple climate analysis and mapping. it's a good resource for example maps and for students without coding skills to do basic analysis of large data sets.

Mineralogy (3)

- For visualizing mineral structure - free program: http://jp-minerals.org/vesta/en/
  -- Susanne McDowell

- Mindat- online mineral database

- Virtual mineral museum- provides java app with 3d mineral structures that can be manipulated.

Writing resources (3)

- A great way to share literature and documents with students: zotero (like end note but for free): https://www.zotero.org

- Http://serc.carleton.edu/nagtworkshops/intro/index.html

- U oregon sci lit bibliography: http://scilit.uoregon.edu/journal-club/bibliography/
  -- Edward_Davis

Formative assessment (2)

- Ask the students to submit a potential "exam question" for each class module. this shows what they understand what's important

- Small online quiz at the end of each module to check retention

Library (2)

- Library

- Navigating graduate school and beyond: a career guide for graduate students and a must read for every advisor, by sundar a. christopher

http://www.qa-umd.appspot.com/results/90429
**Sed/strat** (2)
- Serc!
- Uc-berkeley paleontology website

**Subduction zone systems** (2)
- Earthquake hazards program website from the usgs - acquiring data and earthquake faq earthquake.usgs.gov
- Lectures posted to geo prisms website

**NONE** (4)
- Chronicle for higher ed http://chronicle.com/section/home/5
- I don't know any
- Incorporating active learning exercises into a class can be an incremental process.
- Www.sepm.org