

Especially for Faculty: On-line Resources Supporting Improved Geoscience Instruction

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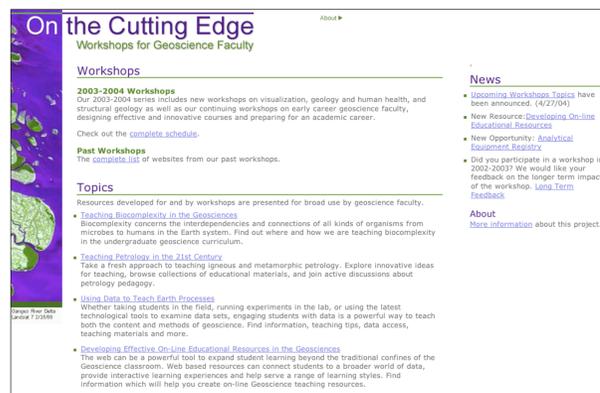
serc.carleton.edu

The Science Education Resource Center offers a number of websites for faculty to help them address particularly challenging aspects of geoscience instruction. Contributing to, and building upon the DLESE broad collection, each site adds information designed specifically to help faculty use DLESE materials effectively.

On the Cutting Edge

Thematic collections developed around workshop topics include teaching materials, informational sites, research on learning, help for developers.

- Teaching Petrology
- Teaching Structural Geology
- Developing Effective On-line Educational Resources
- Teaching with Visualizations
- Teaching Biocomplexity
- Geology and Human Health



<http://serc.carleton.edu/NAGTWorkshops/>

Starting Point: Teaching Introductory Geoscience

Teaching methods and strategies for course design are illustrated with an extensive collection of examples.

- Field Labs
- Interactive Lectures
- Using an Earth System Approach
- Game-based Learning
- Investigative Case-based Learning
- Teaching with Models
- Peer Review
- Role-Playing
- Socratic Questioning
- Teaching with Data
- Using an Earth History Approach

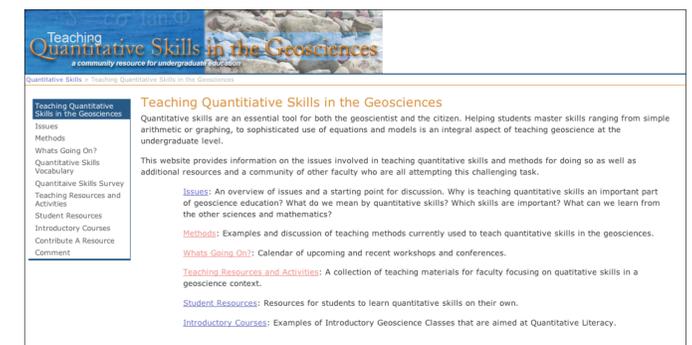


<http://serc.carleton.edu/introgeo/>

Teaching Quantitative Skills in the Geosciences

Why is it important? What does it mean? What can we learn from mathematicians and physicists? Examples, techniques, and more.

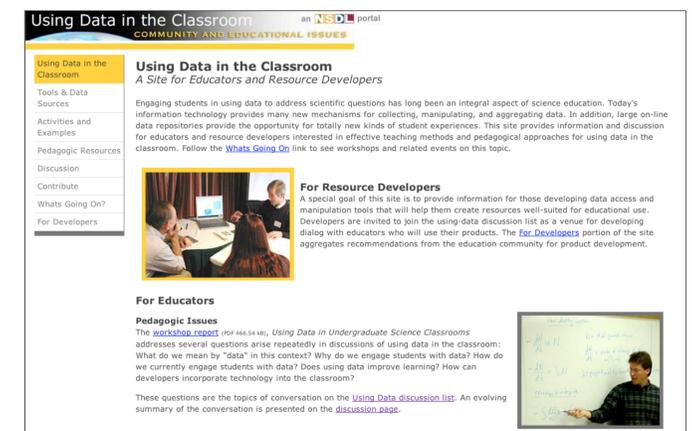
<http://serc.carleton.edu/quantskills/>



Using Data in the Classroom

Find everything you need to teach with data: information, ideas, ready-to-use examples, tools and data sources. A special section for developers provides information about faculty needs for data access and manipulation

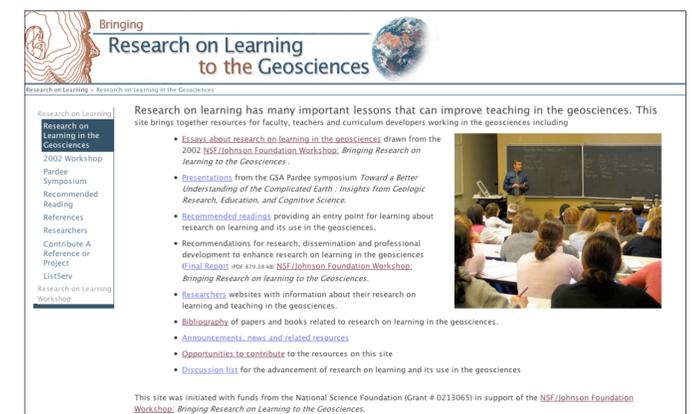
<http://serc.carleton.edu/usingdata/>



Bringing Research on Learning to the Geosciences

Interested in learning more about how research on learning can improve your teaching? Find recommended readings, a bibliography, and information about researchers in this field.

<http://serc.carleton.edu/resonlearn>



Showcase your own examples: serc.carleton.edu/serc/contribute.html

Review the site or the teaching materials: serc.carleton.edu/serc/review.html