

Jigsaw



What it is:

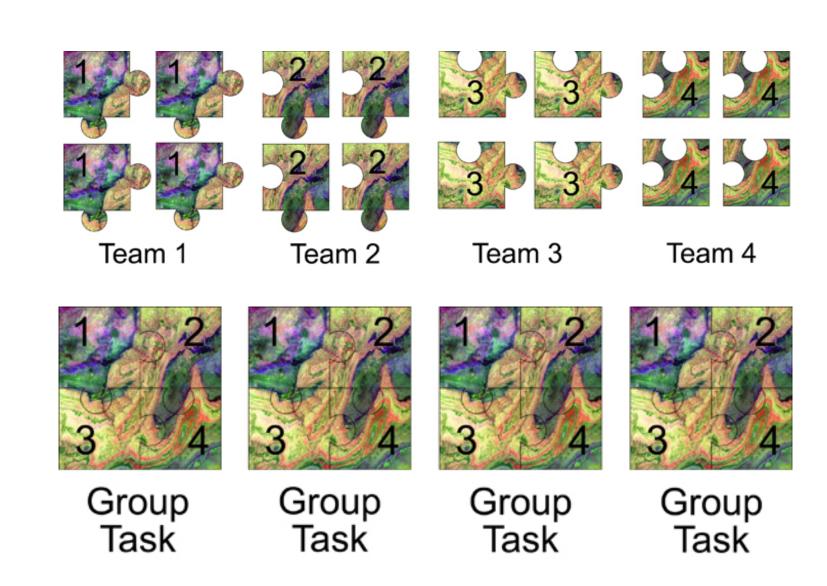
Cooperative learning during which students first become experts in one aspect, then peer-teach and work together to solve a problem or complete a task.

Implementation:

- Instructor divides topic into team assignments
- In teams, students become experts (through an assignment) on one aspect
- Students recombine, with each team represented in the new group
- Students in the group, first teach each other their specialties, then work together to solve a problem or complete a task.

The topic/problem should:

- Be easy to divide
- Have related team assignments
- Not require students to be experts in everything
- Be complex enough to result in productive discussions



Puzzle graphics by Barbara Tewksbury, with background ASTER image from NASA/GSFC/METI/ERSDAC/JAROS, and U.S./Japan ASTER Science Team

Example: Google Earth. Each team analyzes different locations that show similar features (e.g., barrier islands, folds, valley glaciers, volcanic cones, etc.), then combine to discuss similarities and differences of the feature.

Example: Plate tectonics. Teams analyze earthquake, volcano, seafloor age, and topography data maps, then combine to draw plate boundaries and interpret processes.

Designed by Rachel Beane, Bowdoin College
On the Cutting Edge project
Information, photos, graphics, and examples from
Tewksbury, B., Jigsaws. Starting Point Teaching Entry Level Geoscience.
http://serc.carleton.edu/introgeo/jigsaws/index.html