Groundwater-Surface Water

Lesson Overview
Student will be able to summarize how the location and movements of water on Earth’s surface through groundwater zones and surface-water drainage basin, called watersheds, are important to ecosystems and to human activities.

Standards Addressed
SC 2005 7-4.5  Summarize how the location and movement of water on Earth’s surface through groundwater zones and surface-water drainage basins, called watersheds, are important to ecosystems and to human activities.

Disciplinary Literacy Best Practices
Paired Verbal Fluency
Thumbs Up, Thumbs Down

Lesson Plan
Time Required – Approximately 10 minutes

Disciplinary Vocabulary- aquifer, biome, clay, climate, conservation, delta, deposition, drainage basin, drainage divide, ecology, ecosystem, environment, erosion, fertility/soil quality, flood, floodplain, gravel, groundwater, habitat, humus, landslide, natural hazards, natural resources, permeability, permeable, runoff, sand, sediment/sedimentation, silt, soil, soil horizons, soil particle size, soil profile, soil texture, surface water, tributary, water table, watershed, weathering, zone of aeration, zone of saturation

Materials Needed-stopwatch or some type of timekeeping device with a second hand

Assessment- Used Thumbs Up, Thumbs Down Strategy to determine if students used the vocabulary appropriate for the topic in the discussions.
Engage
- Introduce the strategy and explain that students will talk in pairs on a given topic for designated lengths of time. Only one person will talk at a time, while the other listens. When roles switch, the next person must be careful not to repeat anything that has already been said.
- Students practice the strategy with a topic of their choice. Teacher models the timing and switch between partners.
- Next, the teacher models the strategy with a designated topic. Topic: What does our school have to offer various people (students, parents, teachers, etc.)?

Explore
- Students partner and designate who will be A and who will be B. Student A will speak on the topic first.
- Provide the topic to students: Groundwater and Surface Water
- Student A talks for 45 seconds about the topic, then student B talks for 45 seconds about the topic. For round two: each student will talk for 30 seconds. For round three: each student will talk for 15 seconds.

Explain
- Students share the vocabulary words that were used during their dialogue. Teacher reviews vocabulary words that should have been used.

Teacher Reflections and Biographical Information
This strategy is best used when reviewing content that the students are familiar with. It is great to use before a quiz or test. You can use it to see what they know about a topic before you actually start that unit.

Lesson Author:

Jane Meadors is a seventh grade science teacher at Bell Street Middle School in Clinton, SC. She has been in the field of education for more than twenty years. She has experience in special education, self-contained and resource at the middle school level and resource at the high school level. She has taught seventh and eighth math. Her present education experience is teaching seventh science. She holds a BS in Education from Presbyterian College and a Master’s Degree in Special Education from Converse College.