Lesson 13

Water Quality Monitoring

Cognitive Demand:

Interpreting Concepts (C)

Science Literacy (D)

Recalling Science (R)

Overview:

Students will learn about different water quality parameters including: pH, temperature, salinity, dissolved oxygen, turbidity, and presence of macroinvertebrates.

Materials:

- LCD projector or smart board to display power point
- Computers with Web browsers
- Introduction to Water quality PowerPoint from CD or www.mwcd.org/mwee
- Composition Notebook for each student

Teacher Background:

Detailed notes can be found in PowerPoint Presentation.

Setting the Stage:

Before class, make up a sample of water that contains some dirt, vinegar, and sulfur (if you have it). Have another container of clean water.

Show your students the dirty water. Have them smell it. Ask if they think it is clean. Do they know how scientists tell if water is clean or polluted?

Acquisition of Learning:

1. As you present PowerPoint, have the students take notes on the parameters that scientists can use when they are studying water quality.
2. After the presentation is complete, have each student or group of students pick one water quality parameter to research more.
3. After they have gathered the facts, have them write a paper that includes what the parameter measures and how it can affect organisms that live there.

Closure:

Have students present their findings to the class.