
Water Quality Monitoring- Suggested Student Training Steps

First – Introduce the water quality parameters and overview the test kits.

- Introduction to Stream Ecology (from Dept. of Ecology) or NREP Powerpoint (from NREP website and CBEC website)
- Reading (handouts, field manual to WQ testing, Stapp, etc.)
- Demonstrate kits in front of class
- Guest speaker (your coordinator, Department of Ecology, others)

Second – Students practice the tests!

- Plan ahead and get extra hands to help out – parents, volunteers, paraeducators or older students
- Ask students to bring water from a creek or pond near their home; test the school aquarium water, or the school tap water or pick up samples on your way to school from your water quality site

Third – Follow-up practice day: Using the Scientific Method

- Observation: What were the test results from the practice day?
- Hypothesis: What could each group modify to change the results for their test?
- Examples
 - pH - add vinegar or baking soda
 - Dissolved oxygen – vigorously shake bottles or leave bottles in warm spot
 - Nitrates – add a fertilizer
 - Turbidity – add something cloudy, like chalk, flour
 - Using a different water sample (such as school aquarium, pond vs. river, etc.) could change multiple results
- Experiment: Repeat the tests with one of the suggested changes
- Results: Compare to original practice day
- Conclusion: Explain if the tests changed or remained the same. Explain why.

Fourth – Make next hypothesis for Monitoring Day at your Stream

- What do students know about their WQ site? (Hint: Use Google Earth/Maps)
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