It’s Cooler by the Lake

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Hello!
We teach 6th grade in Evanston, IL

Worked with community group Lake Dance to promote Great Lakes Literacy
Water is the driving force of all nature.

Leonardo da Vinci
Our water unit needed a change!
1. **Infiltration**

Water is water doing under the ground? Why should we care?

**NGSS**

DCI- ESS2 Earth’s System
Crosscutting concept- Systems and system models
Look in your own backyard

- Go out in field and measure the time it takes for water to be absorbed
- Easy to scaffold
- Analyze data
Kinesthetic Models

Show water molecules

- Evaporation
- Precipitation
Kinesthetic Models

Show permeability
- Sand
- Soil
- Cement
Putting pieces together

**Basic water cycle**
- Review vocabulary learned in primary

**Runoff and Water Quality**
- Brings up phosphate and nitrate levels
- What you put on the land ends up in the water

**How infrastructure affects rate of infiltration**
- Analyze school property to point out areas of potential flooding
- Learn about local history (Frog Town!)

**NGSS**
DCI- ESS2 Earth’s System
Crosscutting concept- Systems and system models
Going beyond the classroom

NGSS
Practice- Asking questions and defining problems

Beach trip to Lake Michigan and water reclamation plant
At the beach....
At the water reclamation plant...
Track thinking
Interact with professionals
2. **Watershed**

What is this? Is it a shed to keep water?

**NGSS Practice:** Developing and Using Models
Developing and Using Models
Applying vocabulary and extending concepts

If it rains above this house where does the water go? Why does it go there?

Introduce “Continental Divide”
3. Evidence of Student Learning

What did they take away?

**NGSS**
Practice- Constructing explanations
Obtaining, Evaluating, and Communicating Information
Pre/Post models

Directions: Create a 2D model that explains how and why water cycles through Earth.

Useful terms to include:

- Run off
- Condensation
- Tributary
- Sun
- Lake
- Transpiration
- Divide
- Precipitation
- Gravity
- Groundwater
- Eutrophication
- Evaporation
- Pollution
- Infiltration
- Permeability (permeable/impermeable)
Pre/Post models

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<thead>
<tr>
<th>Helpful terms to include:</th>
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<td>Saturated/unsaturated zone</td>
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PSA-
Dystopian Movie Trailer (Dangers of Eutrophication)
Speak at community event
Thanks!

Any questions?

Feel free to email us!