

Curriculum Units by Fellows of the Yale-New Haven Teachers Institute 2010 Volume IV: Renewable Energy

Current Sources of Energy to Maintain a Sustainable Future

Guide for Curriculum Unit 10.04.07 by Laura Namnoum

This unit is designed to explain what energy is, the different sources we use to harness energy, and how energy choices relate to students. It will give students the opportunity to evaluate and draw on their own conclusions. Students will have the opportunity to internalize their effect on the world when they overuse electricity. Students first need to understand where electricity comes from. They will experiment with energy and be able to describe energy in one sentence. In order to understand the availability of energy sources, students will compare renewable resources with nonrenewable resources. Once background knowledge is developed, students will begin learning about wind power, solar power, hydropower, and fossil fuels. They will demonstrate understanding of how energy is transported to their home and how they are able to use it. Students will research and evaluate the cost, effect on the environment, and availability of wind power, solar power, hydro power, and fossil fuels. They will come to their own realization about which energy source makes the most financial and environmental sense to power our world and will create a diagram of how it will be transported to homes in their neighborhood. As a result of this unit, students will understand the energy source their home currently uses, and will recognize the importance of finding alternative sources and conserving electricity.

(Developed for Science, grade 4; recommended for Math, Science, Language Arts, and Technology, grades 3-5)

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