



Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
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The Trouble with Oil

Guide for Curriculum Unit 11.04.01
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As a teacher and resident of New Haven for the past 22 years, I have had an increasing concern about the future of the community and its environment. My goal has been to educate New Haven youth about their local ecosystems and their role in preserving the integrity of their natural surroundings and resources for generations to come. I represent a tool to guide them through a series of discovery activities in order to provoke thoughtful analysis and careful decision-making concerning both everyday needs and lifelong goals and dreams.

With a weak economy, it is certainly no surprise that fuel costs and energy sources are often front-page news. People are struggling to heat their houses and keep their cars on the road. More talk of energy reform may emerge in the near future. Residents wait for incentives to switch to alternative energy sources, to be less dependent on non-renewable fuel sources such as oil. We hope this will lead to a reduction in greenhouse gases and perhaps slow down the effects of climate change – and that the threat of oil disasters such as the BP spill in the Gulf will not be repeated.

The goals of this curriculum are to introduce students to the world of oil and the issues surrounding it. Parts of this curriculum may be used in freshman science classes as enrichment for the energy and conservation goals of the state curriculum. All or part of it could be used for marine science classes or even as part of a biotechnology class. Most of these activities are suitable for students in grades eight through twelve. The curriculum first addresses how oil is located, drilled, harvested and transported. Then students will explore the environmental challenges of offshore drilling and examine the Deepwater Horizon oil spill and its effects on the ocean ecosystem and coast. They will do this through various directed labs, research and student-driven activities. Finally, students will start a more extended study relating the burning of oil and other fossil fuels to changing parameters in the marine environment as a result of climate change.

(Recommended for Biology and Environmental Science, grades 9-12)

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