

Curriculum Units by Fellows of the National Initiative 2009 Volume VII: Energy, Climate, Environment

## Math and Consequences: Environmental Context in Math Instruction

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I believe that teachers of mathematics must prepare students for the social and political conditions that they will adopt it in their adulthood. Because climate change issues are certain to be a serious part of their world, we should therefore be adapting mathematics instruction with the context of environmental issues. Math is a primary tool for solving the problems of human health, habitat, and economics that our students will live with.

My argument is that students will be more competent in their use of math skills, in both future math courses and real life experiences, if they have had some degree of environmental context with their instruction. Teachers have many issues to consider, some that have been popularized in the media, others which are less widely recognized. The primary decision about teaching math through the lens of climate change should be based on the immediate, valid issues of the school's environment, because students who learn from concrete example will have higher math proficiency.

(Developed for Algebra I, grades 8-9, and Geometry, grade 8; recommended for Algebra I, grades 8-9, Geometry, grades 8-10, and Algebra II, grades 10-11)

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