



Yale-New Haven
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Curriculum Units by Fellows of the Yale-New Haven Teachers Institute
1997 Volume VII: Environmental Quality in the 21st Century

Gaia Hypothesis: An Approach to Problem Solving in the Environment

Guide for Curriculum Unit 97.07.02
by Stephen Beasley-Murray

The purpose of this teaching unit is to address current standards in the teaching of ecology, in particular, increased independent learning skills, self assessment through scoring rubrics, and interdisciplinary objectives such as ethical problem solving, life skills, and integration of science with social policy. These practical objectives are intentionally rooted in the philosophy that lies behind current educational reforms, especially that of John Dewey.

The unit begins with a conceptual sketch of the Gaia Hypothesis, followed by a way of thinking about teaching found in John Dewey's philosophy of education that meets the challenge of Gaia in the classroom. There follows an outline of how Dewey unites scientific and moral problem solving for developing social policy which is, in turn, made applicable to solving problems in the environment. These ideas are translated into lesson plans, a course outline to integrate the unit into a course in ecology and biodiversity and finally, analytical scoring rubrics.

(Recommended for Biology and Ecology, grades 9-11)

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