



Teaching Across Disciplines Using Environmental Health

A Teacher Workshop – October 18, 2004 – 8:00am until 4:00pm

Attend this exciting FREE one-day workshop for K-12 teachers!

Join us for a one-day, hands-on workshop for elementary, middle and high school pre-service and in-service teachers, as well as informal educators. Explore classroom materials that use environmental health to teach across disciplines. Receive curricular materials that address **North Carolina Education Standards and teacher substitute reimbursement**. Choose the workshop that best meets your grade level: Grades K-4, Grades 5-8 and Grades 9-12. Upon completion of the workshop, participants will receive a Certificate of Participation (8 hours).

* Register at www.niehs.nih.gov/science-education/events/workshop

Grades K-4

My Health My World: Water Unit

Weave life, earth and physical science together to promote an understanding of the environment and how it affects everyone's health and well being. Intended for students in grades 2-4, the water unit explores the characteristics of water to discover what makes it essential for life. The materials are aligned with the TAKS and are hands-on, inquiry-based, and integrated with mathematics, language arts and reading.

--AND--

ToxRAP™: The Case of the Green Feathers

Determine if the environment is causing health problems by using the processes and tools employed by scientists. A detective theme is used to study how natural air contaminants, such as pollen, can cause allergic and asthmatic reactions. Teaching techniques include an oversized storybook, graphing, hands-on experiments and case studies. Materials can be integrated into science, health, math and language arts.

Grades 5-8

Partnership for Environmental Education and Rural Health: Texas 1867

Offer an innovative approach of integrating environmental health science into science and non-science classes such as math, English language arts, and social studies. This integrative lesson follows a written story (adventure narrative) in which the characters (young middle-school aged students) travel back in time to Texas and are faced with a health problem (Yellow Fever) which they are required to solve.

--AND--

Integrated Environmental Health Middle School Project

Engage students in community-based projects that empower them to make informed responsible choices about their health and environment. Become familiar with IEHMSP print and web-based curricula to build a unit that works within your academic plan. Materials include: EH Fact Files, specific environmental health lesson-plans for social studies, science, language arts, and math teachers, and includes resources for school librarians; Quicksilver Question web-module, students solve an environmental health challenge in a fictional community; and HEART, a manual that guides students in designing their own community-based environmental health research project.

Grades 9-12

AMBIENT

Enhance student understanding of environmental health and ethical issues using this systemic approach to environmental health science education. The AMBIENT curriculum is founded on a health-science problem-based learning method, and is focused around the four environmental themes of air, water, soil and food, as well as an additional emphasis on ethics and toxicology.

--AND--

Hydroville Curriculum Project: Pesticide Spill Scenario and Indoor Air Quality Scenario

Help students understand the complexity of environmental health issues and emphasize that many real-world issues have no single correct answer. This 9th-12th grade problem-based, environmental health science curriculum can help teachers integrate environmental health across subjects. This workshop features activities and training in toxicology, environmental sampling, risk assessment, decision analysis, and science communication. Each participant will take home CD with experiments, teacher instructions, student worksheets, and classroom resources.



When

Monday, October 18, 2004
8:00 a.m. until 4:00 p.m.

Where

National Institute of Environmental Health Sciences (NIEHS)
111 TW Alexander Drive
Research Triangle Park, North Carolina
Rodbell Auditorium, Conference Rooms A, B, C

Objectives

Participants will

- Learn how to help students use scientific inquiry to develop an understanding of connections between the environment and human health.
- Receive training on and curricular materials that can be incorporated into the classroom to engage students.
- Discuss environmental health issues that affect our lives.
- Interact with environmental health scientists.
- Discover and take home other science education resources from NIEHS.
- Receive a Certificate of Participation (8 hours).



To allow teachers the ability to attend the workshop, NIEHS will provide schools with financial support to cover the cost of substitute teachers.

Registration

Register on-line at www.niehs.nih.gov/science-education/events/workshop

There is no cost for the workshop. However, **to guarantee a place in the workshop, participants must register online and then fax a completed registration form with their principal's, or other administrator's, signature to NIEHS (919.316.4606 fax).**



Science Education and the National Institute of Environmental Health Sciences

The National Institute of Environmental Health Sciences (NIEHS), a leader in the development of curricular materials, developed its first grant program for K-12 environmental health science education in 1993. Past science education projects supported the development of environmental health sciences curricular materials and the implementation of teacher enhancement and development programs designed to improve dissemination, utilization, and implementation of environmental health science curricula in the classroom and link researchers in environmental health science with K-12 teachers. Currently, NIEHS supports nine innovative projects within its **Environmental Health Sciences as an Integrative Context for Learning (EHSIC)** program. This program encourages partnerships among environmental health scientists, educators,

and state departments of education with the goal of integrating environmental health sciences across a variety of subject areas for K-12. NIEHS has also supports the development of educational outreach materials through its Community Outreach and Education Program (COEP). A component of a larger research program, the purpose of COEP is to translate basic research emanating from NIEHS-funded Environmental Health Science Centers into knowledge that can be applied to public health. The successful projects within the EHSIC Initiative and COEP have produced some outstanding curricular materials that are being used in classrooms across the country. Teachers attending the October workshop will be trained on materials that have been developed within the EHSIC initiative as well as COEP. For more information on Science Education at NIEHS and links to educational resources, please visit the NIEHS Science Education website at: www.niehs.nih.gov/science-education/

NIEHS Program Contact

Liam R. O'Fallon
Program Administrator
Division of Extramural Research and Training
National Institute of Environmental Health Sciences
PO Box 12233 (MD EC-21)
Research Triangle Park, North Carolina 27709

Telephone: (919) 541-7733
Fax: (919) 316-4606
E-mail: ofallon@niehs.nih.gov