

How Do We Get Environmental Health Lesson Plans Implemented in Idaho Schools?

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Introduction/Background

Idaho is a diverse state with environmental hazards in both rural and urban areas. There is a lack of funding and knowledge about environmental health issues.

The purpose of this project is to implement environmental health lesson plans in Idaho schools to increase teacher awareness of basic environmental health issues, local and regional environmental health issues, and how it can be incorporated into their existing curriculum; increase student awareness of local environmental health issues through an inquiry based process thereby equipping them with the critical thinking skills regarding the environment and their health; get students to recognize the link between the environment and their health; and encourage students to consider a career in environmental health.

Problem Statement

We have some great environmental health lesson plans available to teachers. They are not being utilized due to the lack of knowledge of environmental health issues, general lack of educator familiarity with lesson plan content, and lack of time and resources to integrate lesson plans into their curriculum to meet state educational standards. This last one is probably the most difficult obstacle for teachers to overcome as they are being pressured now more than ever to focus on basic skills such as reading and math in order to address the "No Child Left Behind" initiative.

Project Goals and Objectives

Program Goal: Increase awareness of Environmental Health (EH) issues among teachers and students utilizing EH lesson plans.

Health Problem: Lack of awareness of environmental health issues among teachers and students.

Outcome Objective: By 2011, EH lesson plans will be seen as a valuable resource for teachers and will become part of their standard curriculum.

Determinant: The "No Child Left Behind" initiative has prompted some teachers to focus their curriculum more heavily towards reading and math, leaving very little time to address other areas such as environmental health.

Impact Objective: By 2009 (health) and 2011 (science), apply for adoption of EH lesson plans as approved materials for education curriculum standards in Idaho.



Figure 1. Lesson Plans available in hard copy or CD

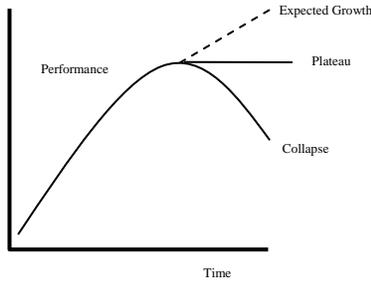


Figure 2. Key variables graph – I expect the use of the lesson plans to go up following the workshops. Over time and with turnover of teachers and other variables, the use of them may either level off or even decline.

Causal Loop Diagram and Applicable Archetype

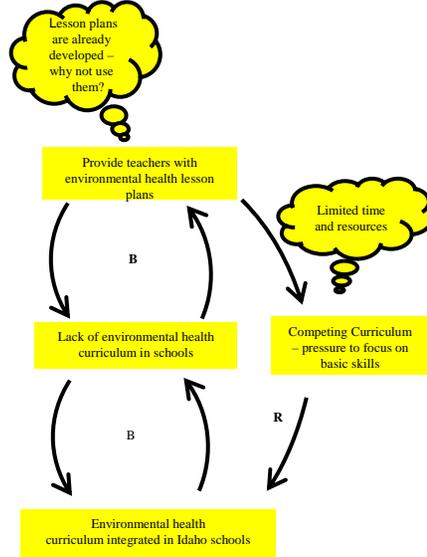


Figure 3. Shifting the Burden Archetype - The main issue/problem is that environmental health curriculum is not being taught in Idaho schools. The quick fix is to provide teachers with copies of the lesson plans and encourage their use in the classroom. However, the quick fix will likely break down due to pressure to focus on basic skills and limited time and resources. The corrective action is actually getting them integrated into existing curriculum and tying them to state standards.



Figure 4: 10 Essential Environmental Health Services by Carl Osaki, RS, MSPH, Northwest Center for Public Health Practice

This project seeks to fulfill the following components of the 10 Essential Services of Environmental Health:

2. Diagnose and investigate environmental health problems and health hazards in the community.
3. Inform, Educate, and Empower people about environmental health issues.
4. Mobilize community partnerships and actions to identify and solve environmental health problems.
9. Evaluate effectiveness, accessibility and quality of personal and population based environmental health services.

National Goals Supported

CDC Health Protection Goals

This project supports the Centers for Disease Control and Prevention (CDC) goal of *Healthy People in Healthy Places*, including Objective 45: "Promote adoption of behaviors that keep people healthy and safe in their homes" and Objective 47: "Improve the health and safety of students and school staff by implementing comprehensive and coordinated instruction, programs, policies, and services that involve families and the community".

National Strategy to Revitalize Environmental Public Health Services

This project supports Goal IV (Communicate and Market) by improving communication and information sharing among agencies and communities (including teachers and students) to enhance the significance and understanding of environmental public health (through utilization of lesson plans). The Project also supports Goal VI (Create Strategic Partnerships) by fostering partnerships among agencies and organizations to advance marketing, communication, and training among stakeholders.

Project Logic Model

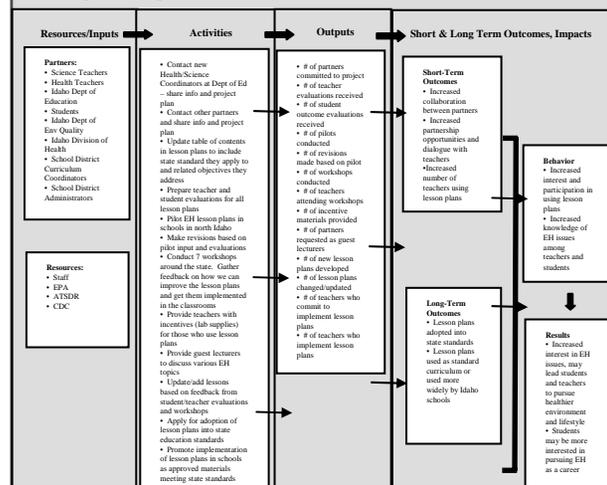


Figure 5. Logic Model. Flow of resources/inputs through short/long term outcomes and objectives

Next Steps

1. Conduct 7 workshops around the state and gather feedback.
2. Provide teachers with incentives (lab supplies, materials) for those who use lesson plans.
3. Provide guest lecturers to discuss various EH topics in the classrooms.
4. Update/add lesson plans based on feedback from student/teacher evaluations and workshops.
5. Apply for adoption of lesson plans into state education standards.
6. Promote implementation of lesson plans in schools as approved materials meeting state standards.

Literature Cited

1. Oaski, C. *Essential Services of Environmental Health*. Northwest Center for Public Health Practice, University of Washington School of Public Health and Community Medicine, Seattle, WA. July 2004.
2. Centers for Disease Control and Prevention. *Health Protection Goals*. Atlanta, GA: Department of Health and Human Services. Oct 2005.
3. Centers for Disease Control and Prevention. *National Strategy to Revitalize Environmental Public Health Services*. Atlanta, GA: Department of Health and Human Services. Oct 2003

For further information

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More information on this and related projects can be obtained at: <http://www.heartlandcenters.slu.edu/ephl/finalProjects.htm>