# Promoting environmental health education in a Native American community through the lens of First Foods

Diana Rohlman<sup>1</sup>, Jamie Donatuto<sup>2</sup>, Larry Campbell<sup>2</sup>

<sup>1</sup>Environmental Health Sciences Center, Oregon State University, Corvallis OR 97331

<sup>2</sup>Swinomish Indian Tribal Community, La Conner, WA 98257

### Introduction

Currently, there are no established environmental public health programs in widespread use in Native American communities, likely because these conventional programs do not resonate due to disparate knowledge, acquisition and transmission beliefs and practices.

### Perceptions of health and the environment

The Swinomish Indian Tribal Community has developed a template of Indigenous Health Indicators for Coast Salish health (IHIs) that reflect the health of the environment, culture, community, body and spirit in a holistic view of health. For more information, visit their website:



http://www.swinomish-nsn.gov/ihi/

### Developing an educational model

Using principles of informal learning, the program will bridge environmental health education with First Foods knowledge. First Foods, or traditional foods, refer to plants, animals, materials and medicines that are central to the lifeways that Indigenous peoples have developed and passed down through countless generations. First Foods represent a unique, place-based knowledge and practice, intimately tied to traditional ecological knowledge. For Coast Salish peoples such as the Swinomish, First Foods include the iconic salmon, as well as crab, berries, cedar and much more; see for example a ceremonial offering in Figure 1.



Figure 1: Ceremonial offering

### **Using Free Choice Learning**

Free choice learning recognizes the learning implicit in the sociocultural, physical and personal context (Falk and Dierking). When viewed through the lens of a modified contextual model, the IHI are centered at the overlap of all three aspects (Figure 2).

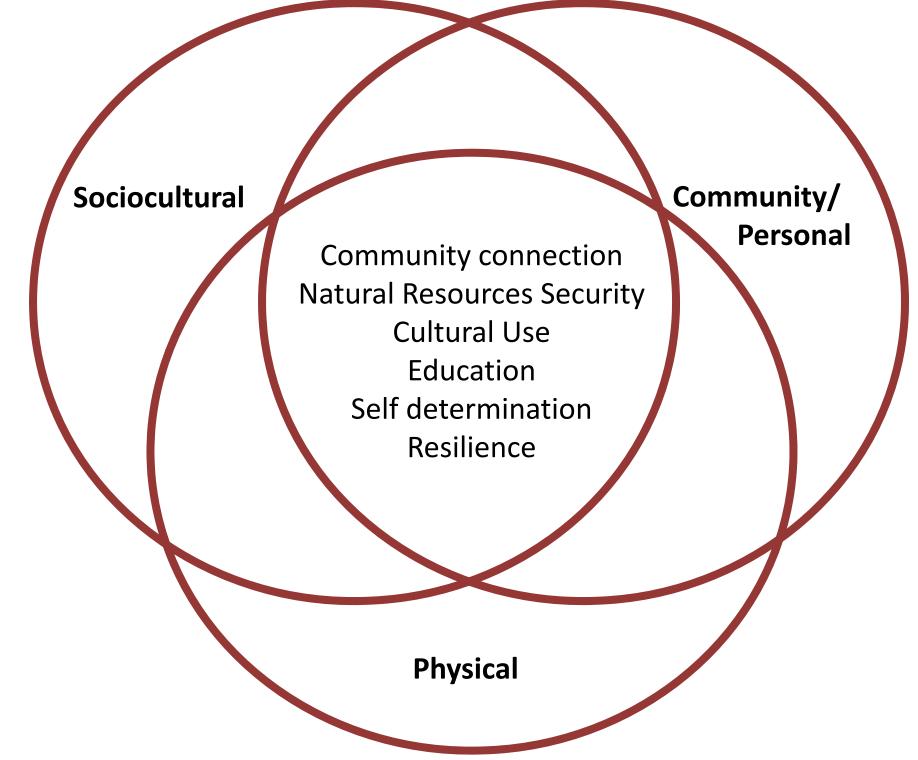


Figure 2. Modified Contextual Model integrating Indigenous Health Indicators

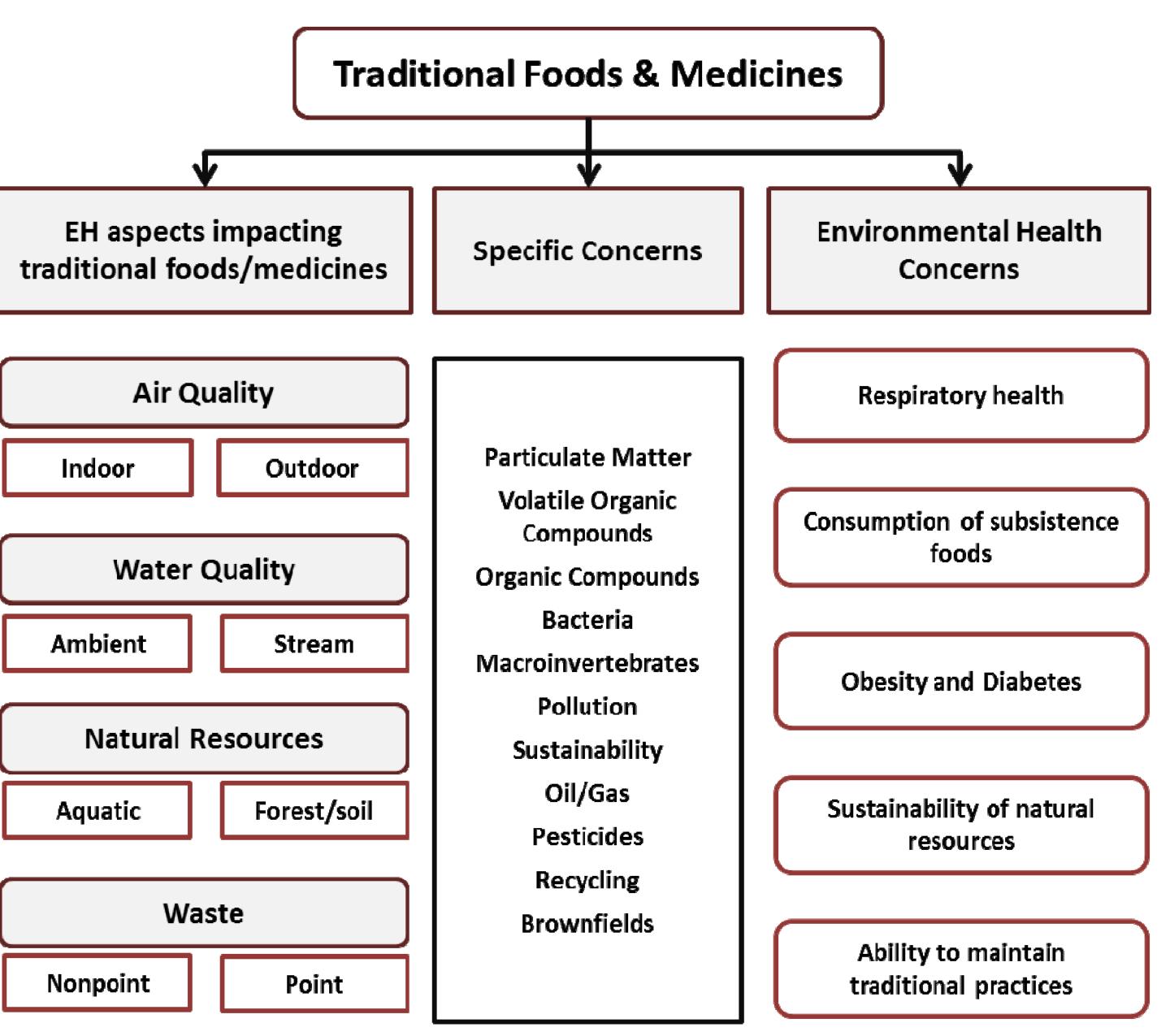


Figure 3. Organizational format of the EH education program, using traditional foods as the focus for teaching EH

## A Community-engaged project

### A tribal-university partnership

The partnership includes expertise in informal STEM learning, environmental health, toxicology, program evaluation, cultural competency, and outreach and engagement.

### A community-driven program

The Swinomish community determines the program's objectives and priorities, from which community-specific curricula will be created that are more engaging for community members. The program employs both local Indigenous knowledge and western environmental public health knowledge, under the unifying theme of First Foods (Figure 3).

### **Educational components**

Short modules, designed to be engaging and hands-on, will be developed around topics of EH, again using First Foods and the IHI as the focus (Figure 4). Modules will be tailored by age group: adults, youth in the after-school program, and children in the early education programs.

### **Evaluation**

The program evaluation plan and analysis will be developed and performed through multiple cultural lenses.



Figure 4. Example of First Foods-Based Environmental Health Education Module

### References

Falk, J. and L.D. Dierking, Learning from Museums: Visitor Experiences and the Making of Meaning. 2000, Lanham, MD: Alta Mira Press.

Donatuto, J., T.A. Satterfield, and R. Gregory, Poisoning the body to nourish the soul: Prioritizing health risks and impacts in a Native American community. Health, Risk & Society, 2011. 13(2): p. 103-127.



