Primer
A Teacher’s Guide to Ethics in Environmental Health

Environmental health ethics have become an integral part of all of our lives. Our water, resources, food, development, and community life are embedded with underlying environmental concerns that call us to consider our ethics, politics, health, and safety. Our students need to learn to examine environmental decision making and ethical reasoning, to become empowered, far-seeing thinkers in a world of vanishing resources and toxicity.

In ethics, as in science, mere opinions are nice to have, but they must be supported by some sort of reason or evidence that cause us to believe in their truth. Otherwise there is no way to prefer or choose one opinion over another. When it comes to environmental ethics, this is precisely what we must do: choose the best strategy, identify the most blameworthy action, select the healthiest outcome, etc. Asking whether people or animals are harmed is important to this process. Asking whether they are harmed on purpose or because of recklessness are questions whose answers carry great moral weight. With students we can consider the moral duty of environmental protection, the blameworthiness of inaction/apathy, and the balance of harms of environmental damage and the benefits we derive from the things (chemicals, machines, processes) that cause the damage.

To help students understand the ethics and concerns of environmental health, you will together examine toxins - where they are found, how they get into and affect our bodies, how they are used, and how they are studied and handled. Below is an overview of how the study of toxicity can be approached and FAQ’s on environmental health ethics education.

Students need to understand the ways that toxins, such as lead, make their way into the environment and into our bodies. There are 2 sorts of scenarios. First, people find a substance useful, tasty, convenient or otherwise of value, so they acquire and use it. They are often not aware, at least at first, of the substance’s dangers. This kind of explanation covers everything from the ancient Romans enjoying beverages sweetened with the sugar of lead, to printing presses using lead type to, in the modern era, everything from paint to bullets to toothpaste tubes. Secondly, people acquire and use such a substance, but they already know it is dangerous. This explanation addresses the history of lead as additive in gasoline and perhaps in some cases in paints.

When examining toxins, such as lead, we can look at the differences between the usefulness or convenience in time of ignorance of the dangers and use in a time of full knowing. Discovering these differences tells the story of the social history of the toxin’s use. We can explore the intentions of substances’ use and identify the ethical story as well – looking at which cases demonstrate bad
intentions, which cases have blameworthy participants, and what kinds of duties people have even when they are not intending to do harm.

Pollution will also be explored from an environmental health and ethics position. The costs and tradeoffs of pollution are examined from the perspective of industry, community, individual, and future generation needs. Students can explore and discuss scenarios of pollution’s acceptable cost, risk, and harm. Sufficient benefit can be measured against the possible costs and competing interests can be weighed and evaluated.

Teachers can guide their students to consider environmental health ethics in regards to future generations. Students will explore what it is to have a duty or obligation to people who do not yet exist. There is always some uncertainty in calculating future risks and harms, but there is debate on how much uncertainty is tolerable. In addition, there are ethical questions about who should make the decisions – researchers, private institutions, educational institutions, governments, or international organizations. A related issue for researchers is whether or to what extent they should use their positions to advocate for or against particular policies. Moreover, research itself may have adverse consequences for systems under study and cause us to ask questions such as: What are the potential risks of research? Is the potential knowledge gained from research worth the risk? How do we answer these questions before proceeding?

*Ethics is neither wagging a finger nor sitting in a circle feeling virtuous. It is more productive to think of ethics as the study of critical thinking. Thinking critically about the tough calls everyone needs to make every day is going to provide more traction in the long run. This is the stuff of true ethics education – the intellectual grounding that one acquires to navigate among the tough calls.*

*Education is most important. The curriculum can include some earnest hand-writing, but it will be most effective if it includes the tools of critical thinking. Does an action harm people? If so, can it be justified? Does an action use people or treat them with disrespect? Under what circumstances should you be able to get away with it (morally speaking)?

*When reasonable people disagree, the best response is not to proclaim in exasperation that anything goes – as if tough calls have no best answers. Reasoned disagreement, in conjunction with critical thinking, tells us that something is going right in our classrooms, boardrooms and commission chambers. That is what ethics education is about, and why it works.*

(“We can navigate the tough calls in life,” by Dr. Ken Goodman, The Miami Herald, May 20, 2001, p. 6L.)
The following section poses questions that you or your students may ask as you use the materials in this ethics module.

**What is ethics?**
Ethics can be thought of as the study of reasons why specific actions are good or bad, right or wrong, praiseworthy or blameworthy. Two well-known approaches to this are that an action is wrong 1) if it harms people without corresponding benefit or 2) uses people as means to an end instead of as ends in themselves. One of the challenges of ethics is to make sense of intention – why people do what they do.

**What is environmental health ethics?**
Environmental ethics applies ethical reasoning to environmental health concerns – the basis of decisions regarding environmental health issues and development, preservation, habitat restoration, and public health. It includes issues of environmental responsibility and awareness in regards to decision making.

**What is environmental justice?**
Environmental justice examines the fairness in issues concerning the environment and the impact of decisions on health, habitat, and development. Environmental justice strives to eliminate favoritism and bias toward financial or corporate gain or toward short sited planning.

**Why teach it?**
Environmental concerns will always be a controversial aspect of society. Educators have a responsibility to provide information about human health concerns, habitat relationships, development, earth resources, etc and their relationship to political and personal decision-making and laws. Generally, educators promote the ethics and values that have general societal consensus, but students will enter the process with their own judgments and ideas regarding environment.

Environmental ethics education involves the teaching of cause and effect in a far-reaching scope. Understanding environmental issues means understanding the long-term effects of decision-making. The ethics component involves examination of current beliefs, changing beliefs and their effect on environmental health values.

**How is ethics taught?**
Philosophers have thought for years about the best ways to teach ethics. One of the most interesting and engaging ways to teach environmental ethics is to use real-life case studies to show how actual, practical consequences follow from the decisions we make in trying to balance values. Students are able to wrestle with the key concepts in real life practical situations so they are engaged with wanting to know more.

**How does the ethics module support the AMBIENT curriculum?**
Issues of environmental health are entwined with policy that defines the collective action needed to protect, prevent or remediate situations that may result in harm. Using the tool of reasoned discourse, students learn how to examine and make decisions based on information, logic and discussion. This extends the students’ understanding of what they
have learned in the modules about the environmental health issue into the study of the reasons why actions are good or bad.

How are ethical decisions made?
Very broadly speaking, there are two best-known ways to do “applied ethics.” One is to evaluate the consequences of decisions and see which actions will do the most good for the most people. This approach, called “utilitarianism” after the “principle of utility” developed by the philosophers John Stuart Mill and Jeremy Bentham, defines goodness or rightness itself as “the great good [or happiness] for the most people.” Of course, this approach requires that we be able to say what the consequences of various are or will be – and this can be very hard to do! Another approach requires not that we analyze consequences or outcomes but that we consider whether by our actions we are treating other people with respect and whether we could imagine everyone acting in accord with the course we have chosen to follow. This approach makes actions into duties independently of their consequences; it is therefore called “deontology,” from the Greek word meaning “duty.” It is a system of morality we associate with the philosopher Emanuel Kant. Other philosophers have tried to combine the best aspects of utilitarianism and deontology.

How is ethical problem solving done?
There are a number of steps in an effective ethical decision-making process:
- Determine the ethical issue or dilemma – what is the problem?
- Identify the key values and principles involved.
- Discover or learn the facts needed to answer questions about the case.
- Rank the relevant issues and problems.
- Develop a plan that is consistent with the ethics that are involved.
- Implement the plan using appropriate actions.
- Reflect on the ethical decision making process.

What are other questions to consider?
- What are the benefits, costs, risks involved with the courses of action available?
- Which course of action is the greatest good for the greatest number?
- Which action further develops the moral character of myself and others?
- Which action is the fairest and does not discriminate or favor?
- What are the moral rights of the people involved and what action is consistent with the shared beliefs?

Are ethics different for different people and different cultures?
Ethical relativism is the idea that ethics are specific to particular cultures. Not all philosophers believe in ethical relativism, thinking instead that ethics involve universal concepts and fundamental moral practices. Supporters of ethical relativism note that some cultures have practices that would be considered immoral or inconceivable by other cultures. These practices would include polygamy, sexism, female circumcision, genocide, and nudity. Most philosophers do believe that ethics are case and situation sensitive, in other words, ethics are applied relative to the people, culture, and morals involved. In environmental health issues, different ethics may apply to communities in which the most basic survival is dependent upon actions which deplete or damage natural resources and affect health, as opposed to communities where damaging resources is only for financial gain and not survival.
Why do research in environmental research and protection?
Research in oceanography, marine biology, meteorology, and marine geology, for instance, could arguably be directed to at least one of the following ends:

- Its own sake (i.e., to learn about natural phenomena and structures purely out of curiosity)
- To identify maximum permissible levels of human intervention and use
- To identify harms/benefits caused by previous intervention and use
- To identify corrective measures for previous, current, and/or future use
- To obtain data to support public policy or advocacy
- To maximize commercial opportunities