



TEACHER'S GUIDE

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WHY ETHICS AND ENVIRONMENT?

Environmental education centers on creating an understanding of one's connection to his or her natural environment—a connection that sparks a sense of value and stewardship. This kind of education is often achieved by positive experiences in the outdoors, where students can learn how ecosystems work, accurately dissect problems and issues, recognize the role of a community, build a sense of responsibility and ownership, respect the entire human and natural context, and make sound, fair, and balanced ecological decisions.

Because these learnings are rooted in values-based thinking, this kind of environmental education naturally leaves room for character education. Since the basis of character education is ethical decision making, and since environmental education constantly presents students with tough ethical issues requiring decision-making skills, it is natural that an ethical–decision-making process be a part of the complete environmental education experience of students as they seek to learn about their surroundings and the impact they have on the world.

This environmental ethics curriculum, based on the Institute for Global Ethics' Ethical Fitness™ model, prepares educators and students to recognize the ethical issues that surround some of the world's toughest environmental problems. How does one balance the need for development with the intrinsic value of natural lands? How does one raise his or her standard of living while striving to cut back on consumption and waste production? Every environmental problem has at its base an ethical dilemma of some kind—the clashing of two fundamental “rights” that can be identified and resolved in this process of ethical decision making. By combining teachings in ecology, natural history, environmental issues, and ethical decision making, this curriculum allows students to think through these tough questions. They are given the tools to apply ethical principles both to resolve these issues for themselves and to participate in their communities in thoughtful and decisive ways. Along with scientists and environmentalists, society desperately needs people who can think deeply about issues that affect our global community, and who can propose values-based solutions.

GOALS OF *HOW BIG IS YOUR BACKYARD?*

- To cultivate an awareness that sound ethics is essential for the balance and health of the natural environment in the 21st century
- To provide a language for talking about ethics and to encourage discussion of the ethical dimensions surrounding environmental issues
- To enhance environmental sensitivity through experiential learning in the field
- To provide practical experience in negotiating a set of values that reflects a group's common ethical ground
- To promote Ethical Fitness by providing practical tools to use when dealing with difficult environmental dilemmas

INTENDED LEARNING OUTCOMES

Students should be able to:

- Understand the changing role of ethics in our relationship to the environment
- Use ethics terminology in a clear and consistent manner
- Demonstrate an increased sense of environmental awareness
- Develop an understanding of the difference between right and wrong, and of the concept of right-versus-right ethical dilemmas
- Analyze right-versus-right environmental dilemmas using four paradigms, and develop an ability to resolve them using three decision principles
- Appreciate the complexity of environmental dilemmas and present a balanced and informed approach to solving the dilemmas
- Define moral courage and identify how moral courage plays a part in decision making and environmental stewardship

BENCHMARKS FOR SCIENCE LITERACY

The American Association for the Advancement of Science has published *Benchmarks for Science Literacy*. *How Big is Your Backyard?* touches on components in each of the benchmarks listed. The curriculum, however, can be most closely tied with the benchmarks of Physical Setting (the earth), the Living Environment (interdependence of life), Human Society (all subcategories), and Habits of Mind (values and attitudes).

STUDENT JOURNALS

Students are asked to keep a journal throughout this program. This will not only serve as an assessment tool, but also as a place for students to keep track of their insights and developments throughout the program. Be sure to let them know that they will be graded on their journals, but that they can also feel free to write or draw in them beyond the

assignments they are given. You should assure them that journal entries outside the given assignments can be personal and, if marked as such, will not be read. (Folding pages over lengthwise is one way for students to communicate that particular entries are for their eyes only.) You may also want to share the scoring rubric in the Assessment section of this curriculum with your students before they begin their journals, so they know on which criteria they will be graded.

ASSESSMENT

Tools for assessment appear in the Assessment section at the end of the curriculum. This section contains three student evaluations, a pre- and post-test to measure changes in students' attitudes, two progress checks, and a journal evaluation rubric.

AN OVERVIEW OF HOW BIG IS YOUR BACKYARD?

Each lesson contains all the materials and instructions needed to complete the activities. The ten lessons build on each other, so it is recommended that they be followed in order. Each lesson includes a lesson plan, activities, handouts (including worksheets and readings), and homework assignments.

While most of the activities can be completed in one class period, some will require more time. Many lessons require outside fieldwork, so some flexibility should be expected in the amount of time the activities take.

The lessons include:

LESSON ONE: BUILDING COMMUNITY

What does the word *community* mean? What are the various communities of which we are a part? What are the relationships between social communities and ecological communities, and what are the values we use to operate in these communities?

LESSON TWO: ADDING AN ECOLOGICAL LENS

In this lesson, an ecological lens is added to the social focus in the previous lesson. What is an ecosystem? What is a biome? What are the parallels between our ecosystems and our communities?

LESSON THREE: COMMUNITY BAROMETERS

Environmental awareness is an essential part of creating environmental sensitivity. What constitutes an environmental problem? Who or what is affected by these problems? How significant is the impact of personal choice?

LESSON FOUR: AIR QUALITY

What causes air pollution and how far can it travel? What are the differences between particles and gases in the air, and what environmental issues result from these physical differences? How does ethics relate to air quality?

LESSON FIVE: RIGHT VERSUS WRONG: KNOWING THE DIFFERENCE

How do we identify *wrong*? How do we know when an environmental decision is wrong? Who or what is affected by a wrong decision?

LESSON SIX: WATER RESOURCES

How important is water as a resource, and how much of a role does water play in our daily lives? How does ethical decision making relate to water resources?

LESSON SEVEN: RIGHT-VERSUS-RIGHT ENVIRONMENTAL DILEMMAS

Ethical dilemmas are those tough choices between two right decisions. What are environmental ethical dilemmas? What are examples of these kinds of dilemmas? What tools can we use to think about these dilemmas?

LESSON EIGHT: HABITAT AND BIODIVERSITY

What is a habitat? What is a niche? What does *biodiversity* mean? Why are these concepts important in environmental decision making?

LESSON NINE: PRACTICING ETHICAL DECISION MAKING: ENVIRONMENTAL STEWARDSHIP

How do we resolve ethical dilemmas? How is ethical decision making related to environmental stewardship? What does it mean to be a steward? Is moral courage needed to be a good steward?

LESSON TEN: RESOLVING ENVIRONMENTAL DILEMMAS

Are there ethical components that are inherent to environmental issues? What are they? How do we use the tools learned so far to find consensus among different interests and resolve environmental problems?