

What We Can Do

Most of the textbook materials discussed in this book have one major flaw: lack of balance. Although we have found factual errors, the key problem is usually that environmental books tell only one side of an often complicated story. They are remarkably consistent in presenting material that supports doomsday scenarios, political action, and pessimistic forecasts.

In this concluding chapter, we would like to help you evaluate what is taught in your children's schools and suggest some steps to offset the myths and half-truths that pass for environmental education. Let's begin with what we see as the proper goals of environmental education.

The Purpose of Environmental Education

Environmental education should help students understand the complex living world and the natural laws or principles that govern it—that is, it should be grounded in science. In addition, it should be taught with an understanding of economics, which is simply the

study of why people make the choices they do. Environmental study offers an opportunity to help children develop the critical thinking and decision-making skills that will help them make wise choices.

Understanding Science

Too often, the science conveyed in our texts gives a false impression of certainty. This is especially misleading with environmental issues, because the science surrounding them is often ambiguous and in a state of flux. The impression of certainty stunts children's curiosity and denies them the unfolding of scientific discovery.

Children should be encouraged to view current debates over environmental issues as part of the search for truth, not as a morality play. These debates can make science interesting and can introduce children to the way knowledge is obtained, how its validity is established, and the tentative nature of many of our conclusions.

Scientists use rigorous methods to collect and analyze information, but they do not always draw the same conclusions from these data. For example, some scientists think that higher CO₂ levels will make the world hotter, warmer, wetter, and greener. Others point to factors that could make the planet cooler.

By exploring these controversies, teachers (and parents) have an opportunity to meld the classroom with the real world and introduce children to the puzzles that have yet to be solved. This, we believe, is much better preparation for becoming responsible adults than the crisis-based approach prevalent in our schools.

Understanding Economics

Unlike science, economics is rarely taught in schools, and when it is, the classes are usually at the high school level. Yet an understanding of economic principles is essential to an understanding of environmental problems.

People have to make choices about how to use our land, air, and water. In making these choices, people respond to incentives. Sometimes incentives help the environment and sometimes they hurt it.

Many of our environmental problems stem from the fact that no one owns the water or the air or the fish or the wildlife. They are a “common pool” resource. Common pools create some harmful incentives.

- ◆ People may choose to use a lake or river as a waste dump. There is no owner of the water who can insist that the pollution be stopped.
- ◆ People may capture too many animals and fish, sometimes leading to extinction. Because wildlife isn’t commonly owned, no one can be sure that an antelope or deer that isn’t captured will be there in the future. Anyone has a right to take it.

Over time, societies have figured out ways to provide incentives for protecting the environment. In some cases, we have laws that limit emissions of waste or prohibit excessive hunting of animals. But sometimes laws designed to protect the environment create harmful incentives. We saw in Chapter 5 that the U.S. Endangered Species Act can actually discourage people from protecting wildlife. And the ban on CFCs to protect the ozone layer has caused a black market in illegally imported CFCs.

Economics helps us to understand the unintended consequences of well-meaning legislation. It also helps us understand why the industrialized countries often have more attractive environments than poor Third World countries. The textbooks generally ignore the fact, but economic growth actually leads to increases in environmental protection.

Why? People want an attractive natural environment. When they are poor, other demands take precedence. But when basics such as food and shelter have been satisfied, people often seek to improve their environment. With economic growth, societies have the wherewithal and the ability to protect the environment and restore it where it has been damaged.

Evaluating Your School's Curriculum

You are now ready to consider your children's environmental curriculum. Your first objective should be to find out whether your child's environmental education is balanced. One-sided presentations, such as the ones identified in the book, are easy to detect. Just ask some general questions.

- ◆ In general, are theories presented as theories or as scientifically established "facts"?
- ◆ Is there a pervasive bias against economic growth and modern technology?
- ◆ Are human beings presented as being "against" nature rather than part of it?
- ◆ Is there an effort to make children feel guilty about the material advantages Canadians enjoy?
- ◆ Is the overall presentation of environmental problems gloomy and pessimistic?
- ◆ Are children being frightened into becoming environmental activists?

On any specific environmental issue, compare the curriculum with the information in this book. For example:

- ◆ Does the curriculum on acid rain mention the findings of the NAPAP study?
- ◆ Do the global warming materials discuss both the critics and the proponents of the idea that the world will get much warmer?

If the information contained in this book is not covered, the curriculum is ignoring legitimate debates and presenting only one side to your children.

Be alert for recommendations of political action. It's not uncommon for texts to recommend that students write their city, provincial, and federal representatives about environmental laws. While such letters have some merit, these activities cross the line between education and political activism. When they are based on one-sided information, they are not appropriate for schools.

Reviewing Materials

A comprehensive review of your children's curriculum starts with textbooks, but does not stop there. Supplemental materials, outside speakers brought into classes, and library offerings are also important.

Textbooks generally fall into three categories: those that contain very little environmental information, those that cover environmental information outside the main subject of the text (usually as extra features or specific chapters), and those with environmental education as a main focus. (See Appendix A for the texts we reviewed, which are typical of the texts produced by the major publishers for children at the 5–10 grade levels.)

Texts provide only a general guideline for teachers, who are usually free to cover material in the text or to ignore it. They are also free to bring in additional materials. With help from parents, a good teacher can use an inadequate text and still provide good education. (This book could be a good source of balance.)

However, supplemental materials often come from environmental organizations. While some of the materials fall into the "learning about nature" category and are useful, others are emotion-laden tracts. Sometimes corporations also unwittingly sponsor environmental education materials and activities that are inaccurate and misleading.

Schools often bring in outside speakers. These may range from a local Forest Service employee to the local president of a radical group like Earth First! Many advocate the same environmental messages presented in the texts.

Many schools also include field trips, outdoor work projects, and even overnight camps in their environmental curriculum. Some of these programs teach children about nature, but others promote the views of activist environmental groups.

What Parents Should Do

If, after evaluating the curriculum in your children's school, you find more indoctrination than education, you may wish to remedy the situation. This section will recommend some measures you can take.

Talk with Your Children's Teachers

Most teachers are conscientious and desire good information. Many are unaware that there are major scientific debates on environmental issues. If you share your concerns about the teaching materials in a friendly, non-confrontational way, many teachers will respond helpfully. Once they learn there is another side to some of the issues, many teachers will be willing to present it.

If, on the other hand, teachers at your children's school are committed to an agenda rather than dispassionate education, you face a more difficult task. You may be in a school district that is committed to indoctrinate students in the environmental views favoured by activist groups. Unfortunately, these individuals and groups are not generally receptive to providing both sides of issues.

Recommend Speakers (or Be One)

Parents can suggest speakers who offer more complete information. Many private organizations, not as well known as the activist orga-

nizations that lobby the government, are accomplishing general environmental improvement. These may include organizations such as Ducks Unlimited, a local arboretum or land trust, an organization that protects injured wildlife, or even a local electric utility that is using some of its land to protect an endangered species. Their representatives could tell children about their work. If you are knowledgeable about an environmental topic, offer yourself as a speaker.

Seek Out New Library Books

When it comes to books in the library, the best idea is to urge the school librarian or the school board to buy additional books that provide balance. (See Appendix C for a list of these books.) Don't try to have books removed—the goal should be to enlarge information, not to censor books already on the shelves. Perhaps you can offer to donate, or persuade a local business to donate, more balanced books.

Organize Parents

If the problem seems insurmountable, you may want to join with other parents and bring your concerns to the school board or even the provincial government.

All this involves political organization, which is not easy and takes considerable time and effort. You may face a long-term battle with highly organized environmental groups. While winning is difficult, it is not impossible.

Start with small steps. For example, parents could urge the local school board to require that all parents be notified in advance in writing whenever supplementary environmental materials are used, or when outsiders are asked to lecture. You could also request that the school use only texts that cite their sources. While citation of sources is a normal standard of scholarship, our children's textbooks rarely cite any sources. By asking for such citations, you would be making an important point.

Educate Your Children

Ultimately, you may have to take on the responsibility of reeducating your children. To do this, you should start by educating yourself. This book provides the basics, but other informative, balanced books are found in Appendix C.

You should be alert to the non-school sources of information your children receive. Environmental information is everywhere—from the McDonald's bag that contains your child's hamburger to G.I. Joe toys and Saturday morning television shows. Much of it is exaggerated.

Finally, we hope that you will explore environmental issues with your children. If you emphasize the spirit of inquiry, you can offset the tone of certainty and the gloom and doom typical of their texts. You will also convey an important message about education. Your children will learn that studying the environment can be an adventure that takes them to frontiers that await investigation and understanding. With your help, that adventure is within their grasp.