

Trendy Schools

Childhood was once supposed to be idyllic and carefree. Children were allowed to be children. But today many schools are plunging our children into serious environmental activism.

“Kids have a *lot* of power,” writes John Javna, the author of *50 Simple Things Kids Can Do to Save the Earth*, a best-selling book found in many classrooms. “Whenever you say something, grown-ups *have* to listen . . . So if saving the Earth is important to you, then grown-ups will have to follow along.”¹

We want our children to learn good citizenship. We don’t want them to be polluters when they grow up. But often, instead of being taught information that will lead to intelligent choices in the future, they are being enlisted in trendy causes and sent out to bring their parents “on board.”

Environmental activism is the latest in a series of social reforms championed in our schools. Schools are fighting the war on drugs, encouraging physical fitness, fostering self-esteem, teaching about sex—you name it. And now our children are supposed to save the Earth. The way these issues are taught shapes the way our children think.

The *Vancouver Sun* recently published a piece in which children spoke out about environmental concerns. This poem by an 8-year-old, was typical:

Pollution is killing us, what should we do?
Recycle and reuse, that's what to do.
Don't drive cars, you know what to do.
Walk, ride your bike, hiking is good, too.
If you put garbage in the right place,
it will make earth a better place.
So remember now what I said today.
It will make earth a better place to stay.²

While many forces affect children's ideas, schools are among the most important. "The public schools have been described as the best sucker list in America," said U.S. Commissioner of Education Francis Keppel in 1976. "Because of the delivery powers of the attendance officer, educational policy is highly vulnerable to use by special interests to forward their personal or public causes. Sooner or later, many social reformers get around to trying to influence what is taught and how."³

However valuable these goals may be, they are driving out basic education in Canada and the United States. Science instruction is particularly weak. In 1995, the Third International Mathematics and Science Study (TIMSS) tested 500,000 seventh- and eighth-grade students from 45 countries. Canadian math students ranked eighteenth, seventh-grade science students ranked nineteenth, and eighth-grade students ranked sixteenth. The United States did not do significantly better.

The US National Commission on Excellence in Education concluded in 1983 that American schools had "lost sight of the basic purposes of schooling."⁴ It pointed out that test scores had been declining almost steadily since the 1960s in the United States.⁵ Unfortunately, instead of strengthening our science programs, environmental education has made them worse.

Straying from Science, and Then Some

In the past, most environmental education was called ecology and it was taught as a part of science. The eighth-grade text *General Science*, for example, still does this.⁶ Its chapter on the environment describes the biomes (deserts, forests, rain forests, etc.) and discusses the interdependence of plant and animal communities. Children learn about the carbon, nitrogen, and water cycles. This text exemplifies the way science books used to cover ecological issues.

Starting in the 1970s, however, as interest in the environment exploded throughout the country, “environmental science” began to crowd out traditional science. Environmental education spread from junior high and high school to the primary grades, while invading other subjects in an oversimplified way. Texts on health, geography, and history now typically contain one or more environmental chapters.

Unfortunately, the textbook authors often know little about the environment. Environmental groups fill the information gap, peppering schools with their materials.

- ◆ The National Wildlife Federation published an eighteen-book series dealing with topics from endangered species to wetlands. Each “Nature Scope” book contains everything the teacher needs to present a series of lessons on the topic. In the early 1990s, teachers were buying close to 60,000 of these books a year.
- ◆ Zero Population Growth publishes readings and activities featuring the harms of overpopulation. “At the heart of these ecological crises is the unprecedented rise of human numbers,” reads ZPG publicity. A typical exercise asks junior high students to discuss the appropriate distribution of food throughout the world in order “to demonstrate the unevenness in the distribution of population and resources and the resulting social problems.”⁷

- ◆ World Resources Institute has a *Teacher's Guide* to accompany its annual report on the world's natural resources. To combat global warming, it recommends that national governments impose fuel efficiency measures, encourage solar energy, and increase reforestation. To preserve biodiversity, it recommends slowing population growth and creating protected areas.⁸

Textbooks endorse such groups as sources of information. *Your Health*, for example, recommends that students contact Greenpeace, Zero Population Growth, Planned Parenthood, and Earth First!⁹ among others. Certainly, many environmental organizations have useful material, but it is often unscientific and unbalanced. And consider:

- ◆ Earth First! is an activist organization best known for spiking trees with metal, so that when the tree is cut, either in the forest or a sawmill, it can break up the machinery. (Spiking has seriously injured at least one logger.)
- ◆ Greenpeace is an international organization that originated in Vancouver, British Columbia. It opposes nuclear testing and commercial whaling, and has called for a total ban on chlorine, which is used to keep drinking water safe.

Some businesses produce materials, too, but these often echo the same themes. The Shell Environment Fund promotes “innovative, action-oriented projects that improve and protect the Canadian environment.”¹⁰ *Earth Action*, a department in *Owl* magazine sponsored by Shell, says: “Air pollution is a big problem for our planet. Air pollution can make allergies and breathing problems worse, harm plants, and it can even make farmers’ harvests much smaller.”¹¹ As we will see later, the air pollution “problem” is not bad in this country, and is improving every day.

Efforts at environmental indoctrination in Canadian schools have not yet reached the level of those in the United States. However, the textbooks being used in Canadian schools contain environmental fallacies, and the government is bowing to pressure groups who want more environmental advocacy in the schools. For example, the British Columbia Ministry of Environment funds a group called the *Green Team* to go into classrooms and discuss environmental issues such as the ecological devastation caused by hydroelectric dams, the supposed garbage crisis in this country, and the wasteful use of non-renewable resources.¹² One of the stated goals of the program is to motivate students “to take personal and collective action to protect the environment.”¹³

Meanwhile, in the United States, the federal government is expanding the environmental education effort. In 1990, Congress authorized \$65 million over five years to support environmental education. The Environmental Protection Agency (EPA) now has an Office of Environmental Education. Marcia Wiley, who coordinated an EPA-funded pilot program in Washington State, explained that the goal was “to catalyze systemic change,” and said one sign of success was that “youth environmental stewardship behaviors” increased 35 percent.¹⁴ Thirty states have passed laws mandating environmental education.¹⁵ The model law recommended by the Council of State Governments says that students should have a “commitment to act for a healthy environment . . . [and] . . . contribute to decision-making processes.”¹⁶ Is this the path that the Canadian government will follow?

Behaviour Modification

Turning children into environmental crusaders is often an explicit goal. In practice, this can mean doing what the teacher says. One

student came home from school after a lesson on recycling and told his parents he wanted his lunch packed in reusable plastic containers, not plastic bags and disposable juice boxes. His father discussed the pros and cons of these alternatives with his son. He pointed out that plastic bags take up little space in a landfill. Because juice boxes are rectangular, many can be packed into a single truck, reducing fuel use. And unlike bottles, they don't spill before lunch time.

The boy decided to keep using the plastic bags and juice boxes. At school the next day, when asked by the teacher why he was still using a plastic sandwich bag, the boy recounted his conversation with his father. When the father picked the boy up after school, the teacher asked him not to interfere with her lessons, stating, "We're trying to make the children more environmentally sensitive." The father replied that he felt the lesson was one-sided, to which the teacher exclaimed, "It's what we are teaching them and I wish you wouldn't interfere."¹⁷

Closely allied to behavioural modification are public and political activism. Some Grade 5 students in Milton, Ontario were lauded for writing a newsletter containing articles entitled: "Acid Rain Eating Away Our Buildings," "Chemicals in the Niagara Mist," and "The Endangered Eagle."¹⁸ *Kid Heroes of the Environment* praises children for picketing businesses, conducting petition drives, and organizing letter-writing campaigns to political leaders.¹⁹

Children are advised to write their political representatives about policies they disagree with. However, because "letter writing often doesn't get satisfying results," Anne Love and Jane Drake, in the World Wildlife Fund's child-directed book *Take Action*, advise that: "Kids' letters get action if ... they aren't overly polite—passion helps."²⁰ Politicians frequently receive letters from school children alarmed by the loss of species or by some other environmental "crisis."

The “Green Team”

Since education in Canada falls under provincial jurisdiction, teaching about the environment differs around the country. One provincial government that has taken an active role in environmental education is British Columbia, the birthplace of Greenpeace. The British Columbia Ministry of Environment sponsors an “Eco Education Program,” which includes a “Green Team” that travels throughout the province to educate students about environmental issues. Although it is not a required part of the provincial curriculum, the program is heavily promoted and publicly funded.

If the “Green Team” focused on teaching environmental science, it could be very useful. However, in addition to learning about the water cycle and the effects of pollution, students learn attitudes. They learn about the wasteful “throw-away society” in which they live. They learn about the environmental damage caused by hydroelectric dams, which “just sit there; they don’t do anything.”¹ Teachers are informed that “the Eco Education Program examines people’s behaviors and the threats they pose to environmental health.”²

Once in the classroom, the “Green Team” introduces the “ecological footprint.” This is defined as “the sum of the natural resources consumed, the land base and the energy required to support current life-styles.”³ The larger the footprint, the larger the amount of energy and resources being “wasted.” The footprint of the average person living in Canada is 4.3 hectares, or more than four football fields. This is compared to the 5.1 hectares taken up by someone living in the United States, the .04 hectares of someone living in India, and the 1.8 hectares of the average person in the world.⁴ The implication is that North America is consuming more than its fair share.

Students are encouraged to recycle, to travel by foot, bicycle, and bus instead of by car (thereby reducing carbon dioxide emissions and the greenhouse effect), and to avoid wasteful consumption of unnecessary and unenvironmental products. These may not be bad lessons, but do we want Canadian children to feel guilty each time they ride in a car?

Notes

- (1) Observation of the “Green Team” at William Van Horne Elementary School, Vancouver, BC, June 1997.
- (2) The Green Team, *Green Team Teachers’ Guide “Eco Education Program”* (Victoria: BC Environment, March 1996), 3.
- (3) The Green Team, 15.
- (4) The Green Team, 15.

Environmental Education: A Morality Play

The ideas underlying environmental materials are often overly simplistic, casting humans as villains and nature as their victim. There are a number of popular themes.

People Are Bad—Nature Is Good

A book for first graders about Antarctica shows a helicopter flying near the nests of penguins. As the penguins flee in fear, birds of prey called skuas swoop in on their eggs. The book explains: “The penguins and the seals have always shared their world with ancient enemies, the skuas and the leopard seals. But these new arrivals [humans] are more dangerous.”²¹

A book about acid rain shows a photograph of a “tombstone” in Hawaii, reading: “IN MEMORY OF MAN 2,000,000 BC – AD 2030—HE WHO ONCE DOMINATED THE EARTH DESTROYED IT WITH HIS WASTES, HIS POISONS, AND HIS OWN NUMBERS.”²² Describing tropical deforestation, *Journeys in Science* states that “the rain forests of South America and Asia are falling under the axe and are not being replanted.”²³

The book that tops the list for its depiction of humans as the enemy is *Gaia: An Atlas of Planet Management*, used as a geography text book in some high schools. Claiming that “humanity is becoming a super-malignancy on the face of the planet,” it uses a “cancer cell” as a metaphor for our population.²⁴

Nature Is Pure and Only People Pollute

In fact, nature is far from benign. The struggle for survival is often brutal and pollution existed long before human beings began to add to the problem. Earthquakes and volcanoes are natural and a natural haze hangs over the Smoky Mountains of North Carolina and Tennessee. Many animal species became extinct without human intervention. Climate changes naturally, from Ice Ages to warm periods of lush vegetation and back.

What we think of as “natural” is often the result of centuries of human intervention. Science writer Stephen Budiansky points out that red cedars take over abandoned cow pastures these days, but only because centuries of grazing have suppressed hardwoods such as oaks.²⁵

And people don’t just cause problems; they also solve them. They create wildlife refuges, prevent forest fires, and restock streams. They restore land that has been mined or damaged by drought, turning it into productive farmland, forests, or parks. They work with nature to create beautiful gardens and arboreta. (Chapters 10 and 11 will discuss what people are doing to protect animals, plants, and natural beauty.) Facts such as these are omitted from most texts that discuss the environment.

Consumption Is Bad

Although overpopulation is viewed as the earth’s biggest problem, overconsumption in nations like the United States and Canada is seen as being almost as bad. A constant theme is that these countries are too rich and consume too much of the world’s energy and resources. “Rich western countries, with only 20% of the world’s population, use 70% of the world’s energy,” says one book of science experiments.²⁶ Another book accuses: “If we in Canada use more than our share of energy and resources, it means somebody in the world gets less.”²⁷

Science Probe 9, a science text, also emphasizes Canada’s unequal share of the world’s resources. It asks you to “keep in mind the following fact: Canadians use more energy per person than people in any other country in the world.”²⁸ It then goes on to suggest: “If both the energy used by each person and the world population continue to increase, the energy resources we use will be in danger of being used up.”²⁹ Such comparisons are designed to make children feel guilty and to promote the governmental redistribution of existing wealth to poorer countries.

This stress on cutting consumption and redistributing wealth omits the fact that the Western world produces a disproportionate amount of goods. These goods are used around the world, benefiting poor countries as well as rich ones. It also omits the fact that wealth must be created; it is not a “given.” Unless the poorer countries create wealth, redistribution will accomplish nothing. (These issues will be discussed more fully in Chapters 5, 6, and 7.)

Technology Is Bad

Most environmental education condemns technology. Children learn that factories and cars pollute the air, air conditioners and refrigerators contain CFCs that destroy the ozone layer, and burning fossil fuels increases the CO₂ in the atmosphere, causing global warming. In contrast, primitive life-styles are exalted.

- ◆ A geography text, *Towards Tomorrow: Canada in a Changing World*, suggests that “the Industrial Revolution created a great deal of human suffering as the price to be paid for progress.”³⁰
- ◆ *The Greenhouse Effect*, a book found in an elementary school library, goes further. It has a picture of Chinese farmers using their feet to operate an irrigation device. “Their lives would be easier if a machine could do the same job,” the caption says, “but if the machine ran on fossil fuels, its use would increase the amount of carbon dioxide in the atmosphere.”³¹
- ◆ *A Great Round Wonder*, a book found in a university’s education library, recalls with nostalgia the pre-industrial age. Illustrated with an idyllic farm scene, it romanticizes: “Back in the old days, when your great-great-grandparents were growing up . . . there were no electric lights, televisions, telephones, or refrigerators . . . Life was hard work, but the air and water and soil were clean and healthy.”³²

- ◆ Betty Miles' book *Save the Earth* has a picture of thirty or forty bicycle riders with the caption: "Bicycles are inexpensive, convenient and non-polluting."³³ She does not mention that bikes are not very useful for other than short distances and are not convenient in rain or snow.

These books ignore the fact that if the people on the Earth are to become healthier and live longer, they will do so through technology, not ideology.

Business Is Evil

Children learn that greedy lumber companies cut down forests. Gluttonous fast food companies clear the rain forests to raise cattle for hamburgers. Profit-seeking hunters extinguished the passenger pigeon. But in the 1970s, things began to change. Environmentalists began to warn that natural resources were being abused and destroyed by the reluctance of the government to curb industrial growth, and the greed of businesses who cared only for profit at the expense of environmental responsibility.³⁴

It is true that business and industry are sometimes guilty of damaging the environment. But halting economic growth is probably not the proper solution.

Things Are Getting Worse

"For most of the time that human beings have lived on Earth . . . [w]e could just take what we needed from nature and feel pretty sure there would always be more." The children's book *Looking at the Environment* continues:

Now, about 160 years later . . . [t]here are huge numbers of human beings . . . But that's not the only problem. Modern people have invented machines such as chain-saws that let us cut down trees with frightening speed. We have bulldozers that level land

and fill in ponds and marshes. We have huge factories that spew poisons into the air and water. We spread deadly chemicals on farmland. These chemicals end up in our food and water. Our cars pollute the air. We are ruining the habitats of other animals, and poisoning the air, water, and soil that all living things need.³⁵

Although the book admits that human inventions have “helped us eat better, stay healthier, and live longer,” most young readers would conclude that the nation remains in desperate straits.

Yet, the environment is better than it used to be. Problems remain, but air quality in most places has improved significantly since 1975.³⁶ Cities that suffer from air pollution are still far cleaner than cities in the less-developed world such as Mexico City.

The impression given our children is that the past was pristine, but it was not. Streets were mired in animal excrement, the air was choked with coal dust, and children died from contagious diseases carried by unsanitary water. For a baby born early in the century, life expectancy in Canada was 59 years.³⁷ Today it is 78 years.³⁸ The enormous improvements in health and environment are not reflected in most of our children’s textbooks.

Government Is the Answer

From slowing the use of fossil fuels to requiring recycling, the solutions proposed are always government solutions. While government involvement is sometimes necessary—in the case of urban air pollution, for example—the textbooks are wrong always to assume that governments can correct a problem.

In fact, the worst pollution problems have occurred in nations in which governments have had the most power. The collapse of the former Soviet Union led to shocking revelations of poisoned streams and unhealthy air throughout that country. And even in our own democracy, the government is not always a good steward of its own properties.

Real Education: Unraveling Scientific Mysteries

Real environmental education would be far different. It would teach children critical thinking skills. It would inform students of science as it really is: an ongoing search for truth.

Acid rain, for example, remains a scientific mystery story. We still don't know what caused the acidic lakes in Nova Scotia or the Adirondack mountains. Acid rain does fall on these lakes and their surrounding area, but there is evidence that the water in some of these lakes was historically acidic. One theory is that the water temporarily lost its acidity in the late nineteenth or early twentieth century when nearby forests were burned. The wood ash was washed into the lakes, making the water alkaline.³⁹ In other words, according to this theory, the acidity is more "natural" than the alkalinity. Exploring this question could be fascinating.

Students would also learn that protecting the environment is more complicated than "good guys" battling "bad guys." Controlling pollution can be costly and can slow economic growth. Slower growth can reduce people's interest in further environmental protection and their ability to bring it about. Children would also learn that regulations often have unintended consequences. For example, tough fuel economy standards to save fuel have led car manufacturers to build lighter cars, and lighter cars mean more deaths when accidents occur.⁴⁰

In sum, environmental education could be a valuable part of science instruction. Instead, it often merely repeats the nostrums of the environmental movement, and molds children into smug crusaders whose foundation of knowledge is shaky at best.

Notes

- 1 John Javna, ed., *50 Simple Things Kids Can Do to Save the Earth* (Kansas City, MO: Andrews and McMeel, 1990), 7.
- 2 “Kids Corner,” *The Vancouver Sun*, May 6, 1995.
- 3 Aspen Institute, *Educational Policy in the Next Decade* (Aspen, CO: Program on Education for a Changing Society, Aspen Institute, 1976), 1.
- 4 National Commission on Excellence in Education, *A Nation At Risk* (Washington, DC: U.S. Department of Education, 1983), 6.
- 5 National Commission on Excellence in Education, 8.
- 6 Peter Alexander, et al., *General Science: Book Two* (Morristown, NJ: Silver Burdett & Ginn, 1989), 144–75. (In the chapters that follow, textbooks will be identified in most cases by their publishers rather than authors. A list of major texts is presented in Appendix A.)
- 7 “Food for Thought” (Washington, DC: Zero Population Growth, 1984), 1.
- 8 Mary Paden, ed., *Teacher’s Guide to World Resources 1990-91* (Washington, DC: World Resources Institute, 1990), 15, 36.
- 9 Joan Luckmann, *Your Health* (Englewood Cliffs, NJ: Prentice Hall, 1990), 542.
- 10 *Owl Magazine*, May 1997, 31.
- 11 *Owl Magazine*, May 1997, 31.
- 12 Observation of the Green Team at Sir William Van Horne Elementary in Vancouver, British Columbia, June 18, 1997.
- 13 BC Environment, *Green Team Teachers’ Guide, “Eco Education Program”* (Victoria, March 1996), 4.
- 14 Marcia Wiley, “Washington’s Environmental Education Model Schools Program,” *Environmental Communicator* (North American Association for Environmental Education, Troy, OH, December 1995), 10–11.

- 15 Environmental Education Associates, *State-by-State Overview of Environmental Education Standards* (Washington, DC, 1992).
- 16 Council of State Governments, Environmental Education Subcommittee, National Environmental Task Force, *Model Environmental Education Act* (Lexington, KY, 1992), 2.
- 17 Thomas Harvey Holt, "Growing Up Green," *Reason* magazine, October 1991, 36.
- 18 Anne Love and Jane Drake, *Take Action* (Toronto: Kids Can Press, 1992), 89.
- 19 Catherine Dee, ed., *Kid Heroes of the Environment* (Berkeley, CA: Earth Works, 1991).
- 20 Love and Drake, 89.
- 21 Helen Cowcher, *Antarctica* (New York: Scholastic, 1990), no page numbers.
- 22 Mary Turck, *Acid Rain* (Don Mills, ON: Collier Macmillan Canada, 1990), 38.
- 23 Peter Beugger and Larry Yore, *Journeys in Science* (Toronto: Collier Macmillan Canada, Canadian ed., 1990), 226.
- 24 Norman Myers, *Gaia: An Atlas of Planet Management* (London, UK: Anchor Books, 1993), 20.
- 25 Stephen Budiansky, "Unpristine Nature," *The American Enterprise*, September/ October 1995, 64.
- 26 Susan V. Bosak, *Science Is ...* (Richmond Hill/Markham, ON: Scholastic Canada/ Communication Project, 2nd ed., 1991), 354.
- 27 Teri Degler and Pollution Probe, *The Canadian Junior Green Guide* (Toronto: McClelland and Stewart, 1990), 58.
- 28 Peter Beckett et al, *Science Probe 9, Nelson Edition* (Scarborough, ON: Thomson Canada, 1995), 362.
- 29 Beckett et al, 367.
- 30 Stewart Dunlop, *Towards Tomorrow: Canada in a Changing World—Geography* (Toronto: Harcourt Brace Jovanovich Canada, 1987), 158.

- 31 Rebecca L. Johnson, *The Greenhouse Effect: Life on a Warmer Planet* (Minneapolis: Lerner, 1990), 101.
- 32 Shelley Tanaka, *A Great Round Wonder: My Book of the World* (Toronto: Douglas and McIntyre, 1993), 40.
- 33 Betty Miles, *Save the Earth: An Action Handbook for Kids* (New York: Alfred A. Knopf, 1991), 78.
- 34 For example see Gary B. Nash, *The American Odyssey: The United States in the Twentieth Century* (Lake Forest, IL: Glencoe, 1991), 757.
- 35 David Suzuki and Barbara Hehner, *Looking at the Environment* (Toronto: Stoddart, 1989), 79–80.
- 36 Boris DeWiel, Steve Hayward, Laura Jones, and M. Danielle Smith, *Environmental Indicators for Canada and the United States*. Critical Issues Bulletin (Vancouver: The Fraser Institute, March 1997), 10–21.
- 37 Jonina Wood, Editor-in-Chief, *The 1997 Canada Year Book* (Ottawa: Statistics Canada, 1996), 116.
- 38 The World Bank, *World Development Report 1992: Development and the Environment* (New York: Oxford University Press, 1992), 218, Table 1.
- 39 Edward Krug, “Fish Story,” *Policy Review*, Spring 1990, 44–48.
- 40 Robert W. Crandall and John D. Graham, “The Effect of Fuel Economy Standards on Automobile Safety,” *The Journal of Law and Economics*, April 1989, 97–118.