

*A Brief History of Environmental and Sustainability Education:
The Oldest Education ... and the Newest*

Environmental education is not new. It is not, in fact, an exaggeration to say that it is the oldest form of human educational experience. Early humans depended on environmental literacy—an informed reading of nature—for their well-being and for their survival. Every society and civilization, from pre-history to our contemporary scientific age, has had nature as a reference point for learning. Teaching and learning, in and about nature, have made it possible to provide for humanity’s most essential needs, including shelter, resources, sustenance, spirituality, philosophy, aesthetics, health, and scientific understanding.

Today, despite the fact that the meeting of essential human needs is in many ways enhanced by advanced technologies, environmental education is not limited to the observation, appreciation, and enjoyment of nature. It is more than a way to offer hands-on contact with living things as a laboratory for scientific observation. At the beginning of the twenty-first century, environmental and sustainability education is not only designed to foster learning in and about nature; it is equally a mode of learning for nature—for the preservation of nature and the natural processes and systems on which all life depends.

Environmental and sustainability education today is an evolving tool which will allow advanced societies to add ecological literacy—the ability to read and assess the needs of nature—to the other forms of literacy which contribute to human health and well-being.

International Support for Environmental Education

Environmental education as we know it today can be traced back to its antecedents in the late nineteenth century and the first half of the twentieth century. These included a range of learning opportunities such as nature study, conservation education, outdoor education, agriculture education, progressive education, and ecology. Conservation education arose from the wish to preserve selected species, and from the “dust bowl” conditions of the Prairies in the 1930s, which awakened people to the importance of conserving natural resources, including soil. Ecology, which emerged as a scientific field in the 1920s, moved from a conservation focus on species to an emphasis on the relationships and interdependence among living and non-living components of nature. Outdoor education came to be promoted as a means of acquiring knowledge about nature through direct experience. Progressive education added a holistic, integrated, interdisciplinary approach to education and “learning by doing.”



The term *environmental education* (EE) came into common use in the 1960s. The need for new knowledge and solutions was evident as public attention and concern became increasingly focused on such issues as world population growth; the contamination of land, air, and water; the depletion of natural resources through industrialization and urbanization; and the growing alienation of people from the natural environment. This focus was intensified by the thinking of environmental writers such as Paul Ehrlich, Barry Commoner, and Rachel Carson, the author of *Silent Spring*. Carson wrote, “the public must decide if it wants to continue on the present road, and it can do so only when in full possession of the facts.” The aim of environmental education is to bring about awareness of critical ecological facts.

In the 1960s the world saw the first NASA photographs of Earth from space, with the planet’s fragility reinforced by Adlai Stevenson’s reference to “spaceship Earth.” Concern for and consciousness of environmental quality gave new direction to a movement in support of education *in, about, and for* the environment that included responsible environmental citizenship.

In 1968 a UNESCO conference entitled Conservation and Rational Use of the Biosphere was held in Paris, France. This event spurred the creation of environmental departments in governments around the world, including Environment Canada, the Ontario Ministry of the Environment, and the Environmental Protection Agency in the United States. The 1970 *National Environmental Education Act* in the U.S. led to the establishment of a federal Office of Environmental Education and legislated support for the environmental educational work being done by many individuals, organizations, and states.

From its beginnings, environmental education included a definition of humans as an inseparable part of nature, in contrast with the “objective observer” standpoint espoused by the mainstream scientific community. Environmental educators set out to advance knowledge of human-environment relations, and of the problems that arose from those relations. Their goal was to seek solutions to environmental problems, and to develop attitudes and the motivation to work towards solutions, as well as preventing future problems. In 1972 the United Nations’ Conference on Human Development in Stockholm, Sweden, identified the development of environmental education as “one of the most critical elements of an all-out attack on the world’s environmental crisis.”

Dr. William B. Stapp of the University of Michigan is recognized as one of the most influential players involved in developing a rationale and principles for environmental education. These principles were formalized in the *Belgrade Charter*, a document produced in 1975 at UNESCO’s International Conference on Environmental Education. A further product of that same meeting was a ten-year plan called the *International Environmental Education Program*. A follow-up Intergovernmental Conference on Environmental Education was held in 1977 in Tbilisi, Russia, to establish the five broad objectives of EE—awareness, knowledge, attitudes, skills, and participation—and to seek a commitment from government leaders to build environmental education into national policy.



The term “sustainable development” was introduced in the early 1980s and advanced by the 1987 *Report of the World Commission on Environment and Development*, more popularly known as the *Brundtland Report* after the Commission’s chairperson. This report stated that “humanity has the ability to make development sustainable—to ensure that it meets the needs of the present without compromising the ability of future generations to meet their own needs.”

International commitment to environmental education took another step forward in 1992 at the UN Conference on Environment and Development in Rio de Janeiro. At this historic environmental event 179 heads of government—including the prime minister of Canada—signed on to *Agenda 21: The Rio Declaration on Environment and Development*, a global environmental guide for the twenty-first century. Chapter 36 of the document is entitled “Promoting Education, Public Awareness, and Training.” The Rio World Summit was followed by other international environmental conferences in Montreal and Thessaloniki, Greece, in 1997, and by the 2002 UN World Summit on Sustainable Development in Johannesburg. Each of these forums invited and promised further commitments to environmental education. **Agenda 21** had emphasized the importance of improving the environmental literacy of all citizens through formal, non-formal, and informal modes of education. Following the Johannesburg “Rio+10” conference, the UN declared the period from 2005 to 2015 as “a decade of environmental learning.”

Environmental Education in Canada and Ontario

Within the elementary school curriculum in Canada, environmental education in the 1960s emphasized nature study, environmental studies, and the outdoors. Courses in environmental science were introduced into the secondary school curriculum. In the late 1960s, William A. Andrews developed an environmental education program at the University of Toronto. This was followed by other university programs, and the Ontario Ministry of Education introduced environmental science courses for grades seven to twelve in 1973. The principles of ecology and environmental citizenship were added to EE courses in the 1970s. Additional environmental education efforts were initiated by organizations such the Federation of Ontario Naturalists and various parks agencies. These contributed to a flourishing of environmental and outdoor education that lasted until the late 1980s.

In the view of many educators, changes in the 1990s to the Ontario education system reduced both the opportunities for and the effectiveness of environmental and outdoor education in schools. Additionally, when a new provincial curriculum was introduced during the same period, environmental science was eliminated as a stand-alone course in high schools. Although the new elementary and secondary curricula include topics in ecology and environment, there is a lack of content on values, attitudes, and stewardship. Supporters of environmental education are critical of a decreasing interest in EE by boards of education and government, a shift in priorities to get “back to the basics,” and budget cuts that have reduced or eliminated outdoor education. A survey called “Educating for Sustainability: The Status of Sustainable Development

