

RESOURCE OVERVIEW

Making Connections: Elementary learning activities in, about and for the environment is a collection of environmental learning classroom activities that help prepare students “with the knowledge, skills, perspectives, and practices they need to be environmentally responsible citizens”.¹ These ideas can be part of Step 5 - Celebrate Success - of the five-step process in implementing the Ontario EcoSchools program.

While each activity can stand alone, it is hoped that an entire school will take an afternoon to celebrate with an environmental learning adventure, focusing on the theme of making connections. Developing students’ understanding about the connections between the Earth and their everyday lives is never out of season, so teachers are encouraged to use these activities whenever they have the opportunity to include them in their classroom teaching.

The activities outlined in *Making Connections*

- ▶ provide an opportunity to contribute to the development of our students’ ecological literacy as they learn about ecosystems and environmental issues
- ▶ engage students in student-centered cooperative activities
- ▶ encourage students to identify their connections to the Earth
- ▶ provide an opportunity for students to go outside
- ▶ solicit cognitive and emotional responses to activities
- ▶ allow students an opportunity to reflect on their learning through discussion and journal-writing

Archived Internet resources, professional development materials and current information about Ontario EcoSchools may be found on the website: www.ontarioecoschools.org

Ecological Literacy

Learning about the relationships between humans and the rest of our natural world is at the heart of ecological literacy. Through classroom learning and active participation in the way the school operates, students can explore the impacts of their choices regarding energy use, waste creation and other environmental issues. Ecological *inquiry* reveals our dependence on the healthy functioning of the Earth’s living systems which give us clean air, water, soil, food, and all the other resources we depend on. As our understanding of the inter-relatedness of all life increases, we can become literate in the ways to care for the Earth that consider the wellbeing of future generations. Ecological *literacy* allows us to understand the urgency of developing protective, sustainable, and restorative relationships with the natural systems that are affected by our daily activities.

¹ Ontario Ministry of Education, *Shaping Our Schools, Shaping Our Future* (2007) p.4

► Planning for an Environmental Learning Adventure

Classroom Introduction

Each teacher is asked to introduce the EcoSchools celebration in her/his class before students begin the adventure. Survey general environmental awareness in the class, then discuss Earth Day and why we celebrate it. Stress the idea of making personal connections to environmental issues through knowledge and actions.

Environmental Activities

All activities in this collection are recommended by environmental educators from across Ontario. In the spirit of experiential environmental education, each activity has allotted time for reflective discussion, with questions listed in the activity outline. The number of activities each school chooses to prepare is optional. One idea is to mount the same number of activities as you have rotations.

Follow-up Discussion Questions

At the end of the Environmental Learning Adventure each class needs the opportunity to discuss and reflect upon its adventure. Encourage students to relate how these activities might inform their future decisions and habits.

Extensions

All learning needs to be integrated and reinforced over time. The activities in this collection make suggestions for future classroom projects/activities. Teachers are asked to consider incorporating these extensions into their classroom work.

Curriculum Connections

The relevant Science and Technology and Social Studies curriculum expectations are identified in each activity. Often activities may be easily modified to cover additional expectations.

The table of the facing page summarizes the curriculum expectations covered in the various activities detailed in this document. Additional expectations in other subject areas may also be addressed in the activity; see the *Environmental education opportunities throughout the elementary curriculum* section on page 6.

	Curriculum Expectations							
Activity	Gr 1	Gr 2	Gr 3	Gr 4	Gr 5	Gr 6	Gr 7	Gr 8
1. Connecting with our Actions: A Million Year Picnic	X							
2. Building bird feeders with recycled materials	X							
3. Food Chains: The Sun Powers All!	X	X	X				X	
4. Connecting with Habitats: Home Sweet Home	X	X	X					
5. Creating a Mini-forest	X	X	X					
6. Water Water Everywhere		X		X	X			X
7. Ecosystems in Action: Web of Life				X			X	
8. Ecological Footprints: Human Wants and Needs affecting the Earth				X	X		X	
9. Embodied Energy: The Life of Fruits and Vegetables			X	X	X		X	
10. Interpretive Hikes	Dependent on type of hike, location, etc.							
11. Connecting to the Everyday Things in Our Lives							X	X
12. Connecting School Issues and Action Opportunities							X	
13. Stakeholders and Perspectives: Force Field Analysis							X	

► Environmental education opportunities throughout the elementary curriculum

Environmental education is...a content area that can be taught. It is an approach to critical thinking, citizenship and personal responsibility, and can be modeled. It is a context that can enrich and enliven education in all subject areas, and offer students the opportunity to develop a deeper connection with themselves, their role in society, and their interdependence on one another and the Earth's natural systems.

Shaping our Schools, Shaping our Future: Environmental Education in Ontario Schools,
Report of the Working Group on Environmental Education (Toronto: June 2007), p. 10

To identify environmental education opportunities throughout the curriculum the Ministry of Education has produced a resource document, *Environmental Education: Scope and Sequence of Expectations* (Toronto: June 2008). This document lists expectations that explicitly connect to environmental education in science and technology, social studies, history and geography. It also outlines suggestions for environmental topics to be connected to other subject areas where the environment can be used as the context for learning.

The activities found in *Making Connections* identify specific expectations in science and technology, social studies, history and geography. Often additional curriculum expectations from other subject areas may also be covered in the course of the activity, using the environment as the context for learning as in the suggestions below.

Language (2006)

...in each of the strands the learning context (e.g., a topic or thematic unit related to the environment) and/or learning materials (e.g., books, websites, media) could be used to foster in students the development of environmental understanding. Also, in each of the strands, there are some expectations that can provide opportunities for exploring environmental education – for example, expectations on making inferences, making connections, analysing and evaluating texts, developing a point of view, and doing research.

Mathematics (2005)

...in each of the strands the learning context could be used to foster in students the development of environmental understanding (e.g. problems relating to climate or waste management could be the focus of student learning). In addition, the mathematical processes (e.g. problem solving, connecting) address skills that can be used to support the development of environmental literacy.

The Arts (1998)

...in each strand of the arts curriculum the learning context and/or learning materials could be used to foster in students the development of environmental understanding. Through music, the visual arts, drama, and dance, students can represent their thoughts, feelings, and ideas about the environment and their understandings of issues related to the environment.

Some ways in which elementary students can make connections with environmental education through the arts include:

- ▶ creating sculptures made of recycled and found materials;
- ▶ composing or accompanying music that reflects nature and/or human interaction with the natural environment;
- ▶ performing site-specific dance works that integrate the natural environment in which they are performed;
- ▶ dramatizing legends, stories, or tales about the environment.

Health and Physical Education (1998)

HEALTHY LIVING: The healthy Eating and Growth and Development components of the Healthy Living strand lend themselves to aspects of environmental education inasmuch as they provide students with opportunities to use higher-order thinking skills.

ACTIVE PARTICIPATION: As students acquire living skills through physical activities, they can develop an appreciation of the natural environment, gain an experiential knowledge of the environment and develop the problem-solving skills necessary for an environmentally aware citizen.

Native Languages (2001)

...in each of the strands the learning context (e.g., a topic or thematic unit related to the environment) and/or learning materials (e.g., books, websites, media) could be used to foster in students the development of environmental understanding. Learning about aspects of Native culture and communities may provide for students opportunities to make connections with local places.

French as a Second Language – Extended French, French Immersion (2001); Core French (1998) [where applicable]

...in each of the strands the learning context (e.g., a topic or thematic unit related to the environment) and/or learning materials (e.g., books, websites, media) could be used to foster in students the development of environmental understanding.

Excerpted from *Environmental Education: Scope and Sequence of Expectations* (Toronto: June 2008).

► Scheduling an Environmental Learning Adventure

- ▶ Set aside a half day, or if possible, an entire day.
- ▶ Set up one activity station for each class that is participating.
- ▶ Repeat a single activity several times in the same room/area as students rotate moving from activity to activity
- ▶ Have students from the EcoTeam, other student leaders and parent volunteers conduct students to various activities inside and outside the school.

Tips And Ideas

- *Use Earth Day to foster leadership within your school. Older students can master some of the primary activities before Earth Day and then come to the younger class and help lead an activity!*
- *Plan for Activity One to be in students' home classroom to save rotation time.*
- *Consider sending a letter home before your environmental learning adventure to inform parents and to spark environmental discussions at home as well as at school.*
- *Plan to have one teacher or administrator in your school act as the floater during your EcoSchools Festival. Any unexpected problems can be dealt with if one person has the opportunity to oversee the event.*