

GRADE 8

See the Preface for important information on the organization of the following material.

The Arts (2009)

A. DANCE

A1. Creating and Presenting

A1.1 create dance pieces to respond to issues that are personally meaningful to them (*e.g., young people’s relationship to authority, global warming [glacial melting, extreme weather events], recycling, land claims, bike lanes*)

Teacher prompts: “How would you structure a dance to convey the impact of a tsunami (the calm before the storm, storm escalating, chaos) on the environment and humans?” ...

A1.2 use dance as a language to communicate messages about themes of social justice and/or environmental health (*e.g., possible solutions to bullying, poverty, racism, pollution, land claims, homelessness, war, deforestation, oppression, colonization*)

A1.3 determine the appropriate choreographic form and create dance pieces for a specific audience or venue (*e.g., ... use features of a site-specific outdoor space to structure a dance on an environmental theme*)

A1.4 use technology, including multimedia, to enhance the message communicated by the choreography in a dance piece

Teacher prompt: “How could you use light and/or sound technology to enhance the message of your dance piece about the majesty of forests?”

A2. Reflecting, Responding, and Analysing

A2.1 construct personal and/or group interpretations of the themes in their own and others’ dance pieces (*e.g., the role of greed in deforestation, war, global warming, poverty*) and communicate their responses in a variety of ways (*e.g., through writing, discussion, oral report, song, drama, visual art, dance*)

Teacher prompts: “How do the projected images (*e.g., of deforestation, war, global warming, poverty*) in this dance piece reinforce the choreographer’s intent?” “What choices did you make in your dance about how to convey your opinion on homelessness?”

B. DRAMA

B1. Creating and Presenting

B1.1 engage actively in drama exploration and role play, with a focus on examining multiple perspectives and possible outcomes related to complex issues, themes, and relationships from a wide variety of sources and diverse communities (*e.g., identify significant perspectives related to an issue and assume roles to give voice to the different perspectives; use improvisation to communicate insights about life events and relationships; develop and present anthology dramas, short scripts, or multi-role plays for a single actor*)

Teacher prompt: “How could you use drama conventions such as conversations, mapping, or role on the wall to dramatize two opposing views on a community issue (e.g., consumerism, landfills, bike lanes)?”

B1.2 demonstrate an understanding of the elements of drama by selecting and manipulating multiple elements and conventions to create and enhance a variety of drama works and shared drama experiences (e.g., use “*a day in the life*” to compare farming, fishing, or hunting practices at the beginning of the twentieth century to those of today; ...)

B3. Exploring Forms and Cultural Contexts

B3.2 identify and describe a wide variety of ways in which drama and theatre make or have made contributions to social, cultural, and economic life in a variety of times and places (e.g., ... by raising awareness of political, environmental, medical, and other social/global issues)

D. VISUAL ARTS

D2. Reflecting, Responding, and Analysing

D2.1 interpret a variety of art works and identify the feelings, issues, themes, and social concerns that they convey

Teacher prompts: “How can a landscape image express ideas or concepts, such as the power of nature in works by printmaker Hokusai or photographer Ansel Adams?” ...

French As a Second Language – Extended French, French Immersion (2001); Core French (1998)

Although no overall or specific expectations explicitly address environmental education, 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.

Health and Physical Education (1998)

HEALTHY LIVING

The first overall expectation, with its focus on healthy eating practices, may lend itself to environmental education as students consider adopting a food plan that includes environmentally friendly food choices (e.g., locally grown food with minimal packaging).

ACTIVE PARTICIPATION

As students apply living skills in physical activities (third overall expectation), 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 literate citizen.

History and Geography (2004)

HISTORY

Confederation, The Development of Western Canada, and Canada: A Changing Society

The third overall expectation in each history topic, along with some specific expectations (especially under the Application subheading), addresses how humans interact with the environment (e.g., socially and economically) within a historical context.

GEOGRAPHY

Patterns in Human Geography

The following two overall expectations, with support from their specific expectations, address the ways in which humans take the natural environment into account in determining human settlement and land use and in planning for the future, and ways in which humans change the natural environment.

- identify the main patterns of human settlement and identify the factors that influence population distribution and land use
- compare living and working conditions in countries with different patterns of settlement, and examine how demographic factors could affect their own lives in the future

The following overall expectation provides students with opportunities to develop the skills of environmentally literate citizens (e.g., inquiry, higher-level thinking, futures thinking, and communication) in an environmental context.

- use a variety of geographic representations, resources, tools, and technologies to gather, process, and communicate geographic information about patterns in human geography

Economic Systems

The following two overall expectations, with support from their specific expectations, address the ways in which humans and the natural environment are interdependent, including ways in which technology has changed human interaction with the natural environment.

- describe the characteristics of different types of economic systems and the factors that influence them, including economic relationships and levels of industrial development
- compare the economies of different communities, regions, or countries, including the influence of factors such as industries, access to resources, and access to markets

The following overall expectation provides students with opportunities to develop the skills of environmentally literate citizens (e.g., inquiry, higher-level thinking, futures thinking, and communication) in an environmental context.

- use a variety of geographic representations, resources, tools, and technologies to gather, process, and communicate geographic information about regional, national, and international economic systems

Migration

Environmental factors, both human and natural (e.g., climate, economic potential, communication and transportation systems) influence migration. Another factor that needs to be considered is the natural capacity of a settlement to support its residents.

- identify factors that affect migration and mobility, describe patterns and trends of migration in Canada, and identify the effects of migration on Canadian society

Language (2006)

Although no specific or overall expectations explicitly address environmental education, 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) can be used to foster in students the development of environmental understanding, with a focus on critical literacy. 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. Critical literacy involves the capacity for analysing texts and challenging their underlying messages, demonstrating self-criticism, and remaining open to further insights into the text.

The examples in the following expectations from the language document provide a context for environmental education.

ORAL COMMUNICATION

- 1.1 identify a range of purposes for listening in a variety of situations, formal and informal, and set goals appropriate to specific listening tasks (*e.g., to evaluate the effectiveness of the arguments on both sides of a class debate on an environmental, social, or global issue; ...*)
- 1.7 analyse a variety of complex or challenging oral texts in order to identify the strategies that have been used to inform, persuade, or entertain, and evaluate the effectiveness of those strategies (*e.g., compare the tone and the ideas emphasized in speeches about non-smoking regulations by a tobacco company representative and a person with asthma and suggest how each approach would influence an audience*)

READING

- 1.9 identify the point of view presented in texts, including increasingly complex or difficult texts; give evidence of any biases they may contain; and suggest other possible perspectives (*e.g., determine whether an environmental argument should include an economic perspective or an economic argument should include an environmental perspective*)

WRITING

- 2.1 write complex texts of a variety of lengths using a wide range of forms (*e.g., ... a report comparing the economies of two nations and explaining how a new industry might affect each nation's economy; ...*)

MEDIA LITERACY

- 1.3** evaluate the effectiveness of the presentation and treatment of ideas, information, themes, opinions, issues, and/or experiences in media texts (*e.g., ... as a class, evaluate the media's coverage of a social or environmental issue over a two-week period*)

Mathematics (2005)

Although no overall or specific expectations explicitly address environmental education, 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 sample problem in the following specific expectation from the Data Management and Probability strand explicitly provides a context for environmental education.

DATA MANAGEMENT AND PROBABILITY

- make inferences and convincing arguments that are based on the analysis of charts, tables, and graphs (*Sample problem: Use data to make a convincing argument that the environment is becoming increasingly polluted.*)

Native Languages (2001)

Although no overall or specific expectations explicitly address environmental education, 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. An example in the following expectation in the Writing strand provides an opportunity for environmental education.

WRITING

- write for a variety of purposes using different forms (e.g., ... write a story to illustrate how Native people view the relationship between humans and the land)

Science and Technology (2007)

UNDERSTANDING LIFE SYSTEMS: CELLS

- 1** assess the impact of cell biology on individuals, society, and the environment
- 1.2** assess the potential that our understanding of cells and cell processes has for both beneficial and harmful effects on human health and the environment, taking different perspectives into account (*e.g., the perspectives of farmers, pesticide manufacturers, people with life-threatening illnesses*)

UNDERSTANDING STRUCTURES AND MECHANISMS: SYSTEMS IN ACTION

- 1** assess the personal, social, and/or environmental impacts of a system, and evaluate improvements to a system and/or alternative ways of meeting the same needs
 - 1.1** assess the social, economic, and environmental impacts of automating systems
 - 1.2** assess the impact on individuals, society, and the environment of alternative ways of meeting needs that are currently met by existing systems, taking different points of view into consideration
- 3** demonstrate an understanding of different types of systems and the factors that contribute to their safe and efficient operation
- 3.9** identify social factors that influence the evolution of a system (*e.g., growing concern over the amount of waste creates a need for recycling centres, and the recycling centres must grow as population and waste increase; the desire to make tasks easier creates a need for pulley systems, gear systems, and hydraulic and pneumatic systems; changes in traditional work hours created by technological advances can influence changes in a child care system*)

UNDERSTANDING MATTER AND ENERGY: FLUIDS

- 1** analyse how the properties of fluids are used in various technologies, and assess the impact of these technologies on society and the environment
 - 1.1** assess the social, economic, and environmental impacts of selected technologies that are based on the properties of fluids
 - 1.2** assess the impact of fluid spills on society and the environment, including the cost of the cleanup and the effort involved

UNDERSTANDING EARTH AND SPACE SYSTEMS: WATER SYSTEMS

- 1** assess the impact of human activities and technologies on the sustainability of water resources
 - 1.1** evaluate personal water consumption, compare it with personal water consumption in other countries, and propose a plan of action to reduce personal water consumption to help address water sustainability issues
 - 1.2** assess how various media sources (*e.g., Canadian Geographic; the science section in newspapers; Internet websites; local, national, and international news on television and radio*) address issues related to the impact of human activities on the long-term sustainability of local, national, or international water systems
 - 1.3** assess the impact on local and global water systems of a scientific discovery or technological innovation (*e.g., enhancing the efficiency of naturally occurring bacteria that consume hydrocarbons from oil spills and convert them to carbon dioxide and water; development of desalination techniques to provide fresh water from sea water*)
- 3** demonstrate an understanding of the characteristics of the earth's water systems and the influence of water systems on a specific region
 - 3.3** explain how human and natural factors cause changes in the water table (*e.g., lawn watering, inefficient showers and toilets, drought, floods, overuse of wells, extraction by bottled water industry*)
 - 3.4** identify factors (*e.g., annual precipitation, temperature, climate change*) that affect the size of glaciers and polar ice-caps, and describe the effects of these changes on local and global water systems