

# Climate Education Framework

## Children Are Our Future Stewards

Department of Education and Early Childhood Development  
Learning and Achievement Branch

August 2022

# Framework Background and Purpose

“Learners develop a balanced relationship with nature and develop the capacity to advocate for sustainable practices as citizens of the Canadian democracy and stewards of the Earth. They know and respect shared Peace and Friendship Treaties and diverse worldviews and perspectives. They learn to address the complex ecological, social, and economic issues crucial to living as a citizen in a contemporary, globally connected, interdependent, and sustainable world.”

Portrait of a Learner - The Department of Education and Early Childhood Development

## FOUR DIMENSIONS OF CLIMATE EDUCATION

Effective climate education embodies the priority platform commitments of a world class education system, healthy and resilient communities, sustainable natural environments, and a transition to the low-carbon economy. This framework promotes learning opportunities aligned with curriculum outcomes and graduation requirements, embedding climate education throughout the anglophone public education system. A comprehensive vision will ensure climate action consistency, accuracy, and excellence in New Brunswick education—engaging, preparing and empowering the citizens of New Brunswick to address climate change and the harsh realities of a “*climate constrained future*” (Lutz, 2020). The framework builds in resilience and adaptive capacity to the educational system and beyond.

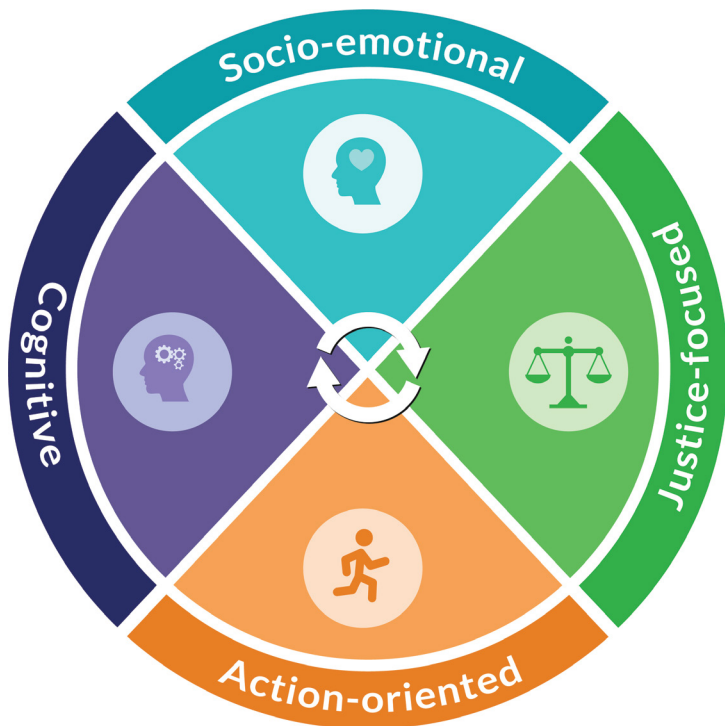
The framework outlines some specific capabilities that need to be developed for effective education for climate action. Effective climate education considers four dimensions both at an individual and collective level:

**COGNITIVE:** Fosters specific knowledge and skills to engage in understanding climate change, its effects and how to address it

**SOCIO-EMOTIONAL:** Incorporates important social and emotional considerations within which learning occurs

**ACTION-ORIENTATED:** Empowers learners to move beyond climate and environmental awareness to action

**JUSTICE-FOCUSED:** Cultivates an understanding that climate injustice is often linked to other types of discrimination based on social and cultural identity



- Incorporate socio-emotional considerations to overcome eco-anxiety, denial and inaction.



- Link with other justice related issues.
- Address who benefits and is most affected by our collective inaction.



- Use teaching methods that are participatory and place-based.
- Focus on collective action.



- Teach scientific consensus on climate change.
- Foster critical thinking skills and media literacy.

# Pathways of Focus

Within each dimension, three focus areas are considered that are aligned with New Brunswick Climate Change Action Plan. Together they increase climate literacy and empower the citizens to address climate change.



- 1. ENVIRONMENTALLY SUSTAINABLE SKILLS:** skills that fulfill the requirements of green jobs and support the transition to a low-carbon economy.
- 2. ENVIRONMENTALLY SUSTAINABLE ATTITUDES:** skills and knowledge that serve technical and adaptative needs for an environmentally sustainable life.
- 3. ENVIRONMENTALLY SUSTAINABLE TRANSFORMATION:** skills that increase the capacity of citizens to engage in addressing inequities. Skills and knowledge which encourage environmental advocacy and engagement in actionable change.





Education can promote the reduction of greenhouse gas emissions by creating opportunities to increase the number of climate actions carried out by learners. These opportunities develop climate literacy and create financial benefits which are magnified by the “power of 10 framework” (Kwauk,2021). The immediate tasks for effective climate education are to fill knowledge gaps of educators and learners by building awareness and increasing climate literacy, to create short-term goals tied to long-term vision and to develop cross-sectional coalitions for coordinated action supporting climate action.

Climate action can take place in varying contexts, at multiple levels, and within communities starting with and building upon what learners already know about climate action from their homes and families, and early learning environments. Indigenous peoples are not only particularly impacted but also important and significant leaders. Their embedded perspectives provide connections across communities. **Engaging in climate action at the local level can inspire global effects through understanding and acting within New Brunswick perspectives and contexts.**

This research-based framework is intended to be integrated in all subject areas and program blocks by curriculum and resource developers as well as educators and school communities. It is intended to empower decision making with the aim for educators and learners to take individual and collective mitigation actions to address climate change. The framework reflects the **New Brunswick Global Competencies**, the **United Nations Sustainable Development Goals**, as well as consultation and co-creation with rightsholders and stakeholders. The framework content is aligned with cognitive and social development along a continuum for ease of use and functionality. Skills build from preceding levels.







Early Childhood Education	Primary Block (Grades K-2)	Elementary Block (Grades 3-5)	Middle Block (Grades 6-8)	High School Block (Grades 9-12)
ENVIRONMENTALLY SUSTAINABLE SKILLS				
<b>Discuss</b> what the Earth and its systems do for us.	<b>Observe</b> how the cycles of the natural world influence/inform Wabanaki ways of being.	<b>Explain</b> the importance of land, rivers and waterways within a local or global context.	<b>Discuss</b> the diversity of life and medicines found in the natural world.	<b>Examine</b> how ecological knowledge is carried through story.
<b>Discuss</b> what we can do for the Earth and its systems.	<b>Develop</b> science literacy skills through inquiry and experiential learning (e.g. questioning and observations).	<b>Read</b> inspirational and diverse texts on climate-related topics.	<b>Consider</b> how natural factors influenced First Nation communities movements (resources, seasons, Mawio'mi). <sup>(1)</sup>	<b>Recognize</b> the interconnectedness of all things: land, animals, people, weather, and plants.
<b>Discuss</b> how sharing and cooperation help us care for the Earth.	<b>Explain</b> what climate change is and express ideas about climate change issues.	<b>Develop</b> climate-related vocabulary.	<b>Discuss</b> how traditional Indigenous knowledge can create new opportunities for green jobs.	<b>Create</b> objects for an environmentally sustainable future.
<b>Demonstrate</b> care, concern, and respect for people and the world around us.	<b>Express</b> ideas about climate change issues using the creative process.	<b>Explain</b> a low carbon economy (using their own words).	<b>Use</b> Scientific Units (SI) to explore climate data, energy and propose solutions to reduce carbon footprints.	<b>Analyze</b> renewable energy and energy efficiency for the low-carbon economy.
	<b>Discuss</b> how people can work together to address climate change.	<b>Define</b> collective action and how it can address climate change.	<b>Employ</b> financial literacy skills to examine the costs of personal choices for a low-carbon economy.	<b>Engage</b> in technical training, mentorship and/or apprenticeship programs for green jobs.
		<b>Describe</b> how positive interactions between people build good relationships for collective climate action.	<b>Use</b> persuasive voice as part of collective action for a low-carbon economy	<b>Engage</b> in career planning for transition to a low-carbon economy.
		<b>Use</b> texts to determine how rightsholders and stakeholders may be positioned in a low-carbon economy.	<b>Identify</b> stakeholders and rightsholders within a local environment.	<b>Practice</b> self-advocacy and collective advocacy to address climate challenge.
		<b>Consider</b> multiple perspectives on climate change.	<b>Practice</b> strategies for addressing climate anxiety.	<b>Identify</b> existing environmental and/or economic policies at a municipal, provincial, and/or federal level.
				<b>Engage</b> with environmental policy to address climate change.

-  **SOCIO-EMOTIONAL**
-  **JUSTICE-FOCUSED**
-  **ACTION-ORIENTATED**
-  **COGNITIVE**

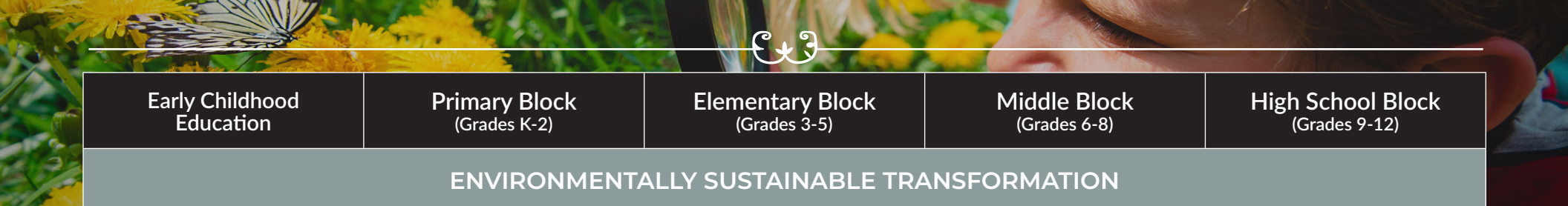
<sup>1</sup> Formal gathering









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ENVIRONMENTALLY SUSTAINABLE ATTITUDES				
<b>Discuss</b> what it means to treat others well and take collective action to address climate change.	<b>Explain</b> our rights and responsibilities as community members to engage in environmentally sustainable lifestyles.	<b>Discuss</b> how oral traditions teach valuable principles for living environmentally and sustainably.	<b>Discuss</b> the role of oral tradition in teaching about ourselves, the land and how to care for people and the environment.	<b>Investigate</b> what economic and environmentally sustainable systems would look like if everyone adopted the concept of Netukulimk. <sup>(2)</sup>
<b>Learn</b> and practice environmentally sustainable behaviours.	<b>Identify</b> and develop a variety of transportation modes for an environmentally sustainable life.	<b>Explain</b> how taking only what you need promotes the environmental well-being of individuals and communities.	<b>Recognize</b> social pressures and make healthy and sustainable food choices	<b>Hypothesize</b> what the environmental impact would be if everyone adopted the concept of Netukulimk.
<b>Discuss</b> and document the value of each person and the environment.	<b>Demonstrate</b> environmental stewardship and reciprocity towards local ecosystems through outdoor education and experiential learning.	<b>Develop</b> a model of a natural phenomenon and/or solution to a problem to address climate change within a local context.	<b>Use</b> evidence-based evaluations of low vs. high impact climate solutions.	<b>Understand</b> about individual and collective carbon footprint, carbon-neutrality, and carbon pricing for decision making.
<b>Develop</b> environmentally sustainable behaviors through exploratory, place-based, play based, and inquiry focused interactions with the natural world.	<b>Develop</b> safe food preparation practices for natural foods	<b>Identify</b> norms that influence our choices for an environmentally sustainable life.	<b>Engage</b> in climate action through project-based, experiential, or inquiry-based learning opportunities. E.g., citizen science.	<b>Analyze</b> the connection of carbon to energy and climate change.
 <b>SOCIO-EMOTIONAL</b>  <b>JUSTICE-FOCUSED</b>  <b>ACTION-ORIENTATED</b>  <b>COGNITIVE</b>		<b>Use</b> critical thinking and media literacy skills to evaluate information about climate change.	<b>Discuss</b> the historical contexts of environmental problems.	<b>Discuss</b> the rights and responsibilities, roles and status of individuals and groups in local, national and global climate issues.
		<b>Demonstrate</b> environmental stewardship and reciprocity through outdoor education and experiential learning.	<b>Develop</b> environmentally sustainable skills through outdoor education and experiential learning.	<b>Develop</b> technical and adaptive skills for an environmentally sustainable life through outdoor education and experiential learning.
		<b>Make</b> environmentally sustainable food choices.	<b>Upcycle</b> materials.	

<sup>2</sup> Concept of taking only what you need and preparing for future generations.



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ENVIRONMENTALLY SUSTAINABLE TRANSFORMATION				
<b>Build</b> intercultural understanding, mutual respect, and positive relationships through the arts to address the effects of climate change.	<b>Recognize</b> how Elders are the most respected community members and serve as knowledge keepers helping to recognize our gifts, through connecting to the land and nature.	<b>Commit</b> to serving the community through environmental advocacy.	<b>Investigate</b> the role the arts play in building intercultural understanding, mutual respect, and positive relationships for environmental engagement.	<b>Examine</b> how social relationships and identities are shaped by the natural environment.
<b>Explore</b> the beauty of the natural environment.	<b>Discuss</b> the importance of taking responsibility and positive action when you have harmed someone intentionally or unintentionally as a strategy to empower action to address climate change.	<b>Exercise</b> responsibilities and rights in local, national and global contexts to address climate change.	<b>Explore</b> ways to foster respectful relationships among various groups to encourage environmental advocacy.	<b>Investigate</b> oral tradition as valid and legal evidence to engage communities in addressing climate change. E.g., citizen science projects.
<b>Discuss</b> the rights of every child to participate fully in cultural and artistic life.	<b>Explore</b> ways to build agreements between friends, family members, and communities for collective action to address climate change.	<b>Promote</b> student-led initiatives to discuss, plan, and/or enact environmental initiatives within the local context.	<b>Speak and act</b> against bias and discrimination to address the effects of climate change.	<b>Develop</b> civic practices to engage in an equitable, democratic, and inclusive society that can address climate change.
<b>Amplify</b> learners' voice in matters that are of concern.	<b>Practice</b> authentic expressions of identity through student-led initiatives to discuss, plan and/or enact environmental initiatives within the local context.	<b>Engage</b> in diverse cultural traditions around food preparation and consumption to learn sustainable practices	<b>Evaluate</b> the effectiveness of various methods of influencing public policy regarding climate change.	<b>Take</b> actions that promote social justice and equity to empower individual and collective action to address climate change.
<b>Participate</b> in collective decisions to address climate change.	<b>Engage</b> in outdoor exploration and recognize the patterns in the natural world to build respect for all species.		<b>Employ</b> social-emotional competencies to empower climate action.	
<b>Participate</b> in varied and diverse community events to share and learn about climate action.				

-  SOCIO-EMOTIONAL
-  JUSTICE-FOCUSED
-  ACTION-ORIENTATED
-  COGNITIVE

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