

Nova Scotia

Nova Scotia's Curriculum offers a socially progressive and streamlined approach that presents teachers with a broad overview of curricular progression between grades, enabling them to easily assess not only see what students have learned in learned in past grades, but also what is forthcoming in future years. There are similarities with the other Atlantic provinces such as the use of Essential Graduation Learnings and common strands in Math and English with respect to scope and sequence (for example: statistics, data, reading, listening, writing). However, other courses offered in Nova Scotia delve deeper into cultural roots, history, and environmental topics. For example, the Health curriculum includes an outcome related to environmental sustainability. A social justice narrative is evident across Nova Scotia's curricula—from language classes in Mi'kmaq and Gaelic, to African Canadian Studies courses, and a focus on topics such as colonization, treaty education, racism, social stratification, and even mental health as studied in Biology.

English

The curricular documents for English that were reviewed are from 2015-2016 and are grouped into Kindergarten-Grade 3, Grades 4-6, 7-9, and 10-12. Each grouping follows general strands that are consistent with the other Atlantic provinces and the specific outcomes do allow flexibility for teachers to engage with learning related to critical Indigenous environmental topics. As the grades progress, a critical lens takes shape with outcomes that question racial equity and cultural context in media and communication that could be connected to this area of inquiry such as:

- 7.1 Recognize that print and media texts can be biased and become aware of some of the ways that information is organized and structured to suit a particular point of view (p. 6)
- 7.7 Demonstrate an awareness that texts reveal and produce ideologies, identities, and positions (p. 10)
- 7.8 Evaluate ways in which both genders and various cultures and socio-economic groups are portrayed in media text (p. 10)

All English grades also offer students and teachers flexibility to explore their own texts. While there are no explicit outcomes related to Indigenous environmental topics, the curriculum is flexible and approached through a social justice lens that could easily be tied to related themes.

Math

Nova Scotia's Math curriculum is formatted similarly to English with respect to grade groupings and overviews, it also follows similar general strands to the other Atlantic provinces. Within the Statistics and Probability strand students are required to work with data, creating the opportunity to engage with environmental data that highlights issues faced by Indigenous people. Other than that, there are limited opportunities elsewhere across the grades to make strong connections to Indigenous environmental topics except for one outcome in Math 11:

- M01.01 Students will be expected to solve problems that involve the application rates; Interpret rates in a given context such as the arts, commerce, the environment, medicine, or recreation (p. 143)

Science

Nova Scotia's Science curricula are also quite recent (released in 2015) and present a global and holistic view of science. However, although there is some Indigenous content apparent within the outcomes, this seems to disperse as the grades progress. Within the elementary K-8 curriculum, students explore diversity and ecosystems as well as relationships between living things and the environment. Grade 4 has one outcome in particular related to Indigenous environmental themes:

- Outcome 2: Students will investigate the interrelatedness among animals, plants, and the environment in local habitats: Investigate and compare local habitats and their associated populations of plants and animals, inclusive of Aboriginal perspectives; describe how human actions and natural phenomena can change and/or conserve the environments of habitats, inclusive of Aboriginal perspectives (p.1)

Moving into more senior years, students in Grade 7 are required to consider major events in the earth's history and are expected to consider:

- Ecological Succession: Action. Defend a proposal to protect a habitat and provide examples of various issues that can be addressed in multiple ways (113-11, 211-5, 113-1) (p. 31)
- Ecological Succession: Action. Research individuals/groups in Canada that focus on the environment, using various print and electronic sources. (112-4, 112-8, 209-5) (p. 31)

High school courses are divided into more specialized areas with little room or flexibility for content related to critical Indigenous environmental topics in certain subjects such as Chemistry and Physics. However, Grade 10 Science does have a unit called "Life Science: Sustainability of Ecosystems" which offers many potential connections to Indigenous environmental issues that could be used to build upon the previous outcomes identified in Grade 7. Grade 11 Biology also has units such as "Biodiversity" and "Interactions Among Living Things" which offer some flexibility that could be amenable to considering sociocritical environmental topics.

Social Studies

In keeping with the same themes as the other Atlantic provinces, the Social Studies program in Nova Scotia is built around general strands such as Individuals, Societies, and Economic Decisions; People, Place and Environment; and Culture and Diversity. The Social Studies program follows a similar format to the other subjects and was quite recently updated (2015-2016). It is very inclusive of Indigenous perspectives with a social justice theme throughout. The curriculum explores treaty education, racism, and human interactions with the

environment which all offer inviting opportunities for teachers to engage with critical Indigenous topics. Beginning in Kindergarten, Nova Scotia students learn about treaties and this continues up to Grade 3. Notes to the teachers within the outcomes demonstrate a careful consideration of the Indigenous cultures of students for example:

- Outcome 2: Students will take age-appropriate action to practice responsible behaviour in caring for the environment: ask questions to gain information about the need to protect the environment, discuss responsible behaviour and caring for the environment [Teacher note: Be mindful of Mi'kmaw beliefs and practices in relation to the environment], engage in a practice(s) that can help to solve problems and promote environmental sustainability in their community (p. 1)

Connections to the Land and sustainability run throughout Nova Scotia's curriculum, including the requirement that students identify a sustainable topic/issue in Grade 2 and the impact of a resource exploration in Grade 4. Students in Grade 5 begin to look at relationships during colonization between settlers and Indigenous people and in Grade 6 students examine different sustainability practices as well as human rights issues. Grades 7, 8, and 9 look at Canadian identity and connections between humans and natural resources.

Nova Scotia's high school Social Studies program is divided into Geography and History with regional, national, and global perspectives at various grade levels. Geography 10 looks into the complexities of the earth and provides several opportunities for teachers to connect to critical Indigenous environmental topics such as:

- 7.5 Use climatic data to identify major climatic zones of the world (p. 28)
- 8.2 Demonstrate an understanding that humanity is part of the planet's physical-biological web, and that sustainability is dependent upon wise planet management systems and global co-operation (p. 28)

Grade 10 History has no direct connections to the themes of this inquiry; however, Grade 11 Canadian History looks at economic systems in Indigenous societies and their relationships with colonization. Students also look at the struggles of Indigenous peoples in attempting to regain sovereign rights along with Indigenous contributions to the legal system in Canada. One important outcome that provides an interesting connection to Indigenous environmental topics points to the relationship between land and culture:

- J2 Demonstrate an understanding of the relationship between land and culture and analyze the effects of displacement (p. 94)

Students also learn about pre-and post-contact Indigenous democracies and how each culture had their own social structure at the time of colonization.

Geography of Canada 11 looks focuses on resource development as well as connections between cultures and physical features of Canada. A notable outcome within this course that we only found in Nova Scotia is:

- 7.3 Demonstrate an understanding of the issue of environmental racism (p. 136)

Two courses within the Social Studies subject area: Global History and Global Geography in Grade 12 continue similar themes but on a larger scale as in both courses, students are expected to conduct a research project that could be used to look at critical Indigenous environmental issues through the specific outcome:

- 6.2 Investigate the extent to which the environment has been/is affected by cultural attitudes and practice (p. 256)

And within the Global History course:

- 4.2 Investigate a global event that has raised fundamental questions of justice (p. 259)
- 5.5 Illustrate the interdependence of societal change, justice, economic disparity, and geo-political power (p. 259)

References

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