

Sustainable Development Goals Act - Law Amendments submission

Karen McKendry, in part representing the Environmental and Sustainability Education Caucus

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Good morning. My name is Karen McKendry, and among other things, I am an environmental educator. I moved to Nova Scotia in 2005 to work on a Master's degree at Dalhousie University. Outside of school, I was keen to engage kids in hikes and nature-based activities in the wilds of Nova Scotia, but found there was no organization focused on this in the province. So I founded my own – the Young Naturalists Club, a nature club for kids and families that teaches people about the wild species and spaces of Nova Scotia. As I got more involved in the environmental education movement in the province, it became apparent that there were some glaring holes in environmental education in Nova Scotia. Unlike other provinces, environmental education was not enshrined in the public school curriculum here, and there were few opportunities for adults to engage in environmental education in their workplaces, or personal lives.

Environmental education is simply education about the issues impacting the environment, as well as actions we can take to improve and sustain the world we all depend on. It is a process that allows learners to explore environmental issues, engage in problem solving, and take action in an informed way. It covers topics like climate change, biodiversity loss, clean energy, pollution, waste and recycling, and more. Environmental education is NOT advocacy from a particular point of view. Rather, it focuses on examining environmental issues from different points of view, and encourages critical thinking and problem solving in advance of action. Environmental education creates learners who with higher environmental literacy – their improved understanding of the natural world and their role in it gives them the skills and motivation to make responsible decisions that considers their relationships to natural systems, communities and future generations. It lends itself well to exactly the kind of emphatic and multi-disciplinary approaches that we are realizing we need in a swiftly changing world.

Recognizing that the environmental literacy gaps in Nova Scotia would not be addressed by my actions alone, I joined Nova Scotia's Environment Education Caucus, now called the Environmental and Sustainability Education Caucus. This network of educators – both in classrooms and outside the school system – strives to raise the profile of environmental education and sustainability education, and improve the capacity for teachers and learners to access great quality programs. The groups involved in the caucus have visited hundreds of classrooms over the years, with their curriculum-linked environmental education programs, thanks to interested, resourceful teachers who saw the value of

environmental education. We have given talks for teachers in training, and most recently put on our second professional development day for teachers and educators entirely focused on environment education programs that teachers can access across Nova Scotia. But we're always on the outside looking in – without a requirement to seek out environmental education resources and programs, only a fraction of teachers have discovered what we have to offer, and the extensive world of environmental education resources that can be brought into the classroom.

In 2007, while I was still a grad student and just getting the Young Naturalists Club off the ground, a new piece of provincial legislation was introduced – the Environmental Goals and Sustainable Prosperity Act. I was SO EXCITED! Here I was, in Nova Scotia, right while the country's most ambitious goals around many aspects of the environment were about to be enshrined in law! I read the wording of the new Act and found it both inspiring... and lacking in one way. I had just learned of the Law Amendments feature of the legislative process in Nova Scotia, and so mustered up all the courage I could, and signed up to speak to the Law Amendments committee about EGSPA. In my comments, I commended political leaders on bringing forward this progressive, needed piece of legislation, but pointed out that "This Act tells us what we have to do, and when we have to do it by, but not *why*. **It is lacking a vital component – and that component is environmental education.**" Environmental education would connect the dots for people – why we need to take the specific actions described in the Act in order to both prosper financially and conserve and restore the natural systems that sustain us.

Twelve years later, the Act is now being renewed and replaced, and there is still a serious lack of prioritizing environmental education, and Nova Scotia is now a laggard on this front. In the last 12 years, the British Columbia Ministry of Education developed curriculum maps to aid in teaching environmental education across all grade levels. Ontario enacted a policy in 2009 to guide incorporation of environmental education into *all grades* and in *all subjects*. They crafted a set of Standards for Environmental Education, and incorporated learner expectations for every grade level, and every subject, by 2017. Both Ontario and BC introduced teachers to networks that support bringing environmental education into the classroom, networks just like the ESEC here in Nova Scotia. And in New Brunswick, more than \$8.4 million of the funds the province collects through their Environmental Trust Fund will go this year to many community-based environmental education projects, and research initiatives. We have an Environmental Trust Fund in Nova Scotia too... but it just sits dormant every year, even though its original purpose was to fund environmental education and other conservation projects.

Environmental education is not new, and its needed more than ever before. The public school system is where the largest population of learners are educated, and those learners are going to be the citizens and leaders of Nova Scotia in an increasingly unfamiliar future. We can better equip students with the knowledge and skills they need to work on environmental issues, if this Act states environmental education as a priority. Currently, the word “education” does not appear in bill 213 at all. Specifically, I recommend that environmental education be included in section 4, the principles section. It could be added as clause 4 a) v) . The Act could be changed to state:

“This Act is based on the following principles:

(a) the achievement of sustainable prosperity in the Province must include all of the following elements:

(i) Netukulimk,

(ii) sustainable development,

(iii) a circular economy,

(iv) inclusive economy, and

v) environmental education.”

Improving environmental education, for youth and adults, is foundational for achieving the aims of the Act, including over the long term. There are a variety of creating ways to do this, and I want to be a part of conversations that explore these options, and the conversations around the regulations stemming from the Act. For example, Ontario created a working group, led by Canadian astronaut and educator Roberta Bondar, to develop a policy framework for bringing more environmental education into Ontario’s public schools. The province of New Brunswick worked with a local academic to create a plan for how to implement aspects of the province’s Climate Change Action Plan through environmental education, awareness, and capacity building.

Improving everyone’s understanding of the natural world, and our relationships with it, is possible, and essential to becoming a more sustainable society. I also view it as crucial to achieving the aims and ultimately the goals that will come from this Act. The Sustainable Development Goals Act takes Nova Scotia in a more sustainable and successful direction. However, this it will only be effective and supported if we all understand WHY we are doing this – environmental education answers that question. How awful would it be to gain national recognition as a “green and sustainable province,” and

when an average Nova Scotian is asked why their home province took this bold step, they say “I don’t know.”

Thank you for your time and consideration. I’ve brought for you a more detailed definition of environmental education and an explanation of why it is needed in the new Act, and I encourage you to get in contact with me or any other member of the environmental education community on how the wording of this Act can be improved, and how regulations that support environmental education could be developed.

I’ve also brought a little treat for you, if you can answer some questions from me:

Bonus questions:

I’ve brought some cookies that are sweetened with maple syrup. From what species of maple does maple syrup come from? Name another species of maple native to Nova Scotia.

Some of the cookies are in the shape of acorns. From what kind of tree do acorns come from? Many species of wildlife are attracted to and feed on acorns in the fall, from deer to weevils. Also of note, the word “acorn” was removed from the Oxford Junior Dictionary in 2015. Apparently it is no longer being used as often by children, compared to some more modern words like “broadband.” If we don’t make learning about nearby nature a priority in our school system, we contribute to the demise of appreciating our natural world.

Appendix: Why Environmental Education in EGSPA

EAC Proposed Goals for a renewed EGSPA:

"Goal #10: Integrate Environmental and Biodiversity Education into the provincial public school curriculum by 2023."

What is environmental education (EE)?

- "A process that allows learners to explore environmental issues, engage in problem solving, and take action to improve the environment" (USEPA)
- "It ensures all students will have many opportunities to acquire the knowledge, skills, perspectives and practices they need to become environmentally literate citizens." (Ontario MOE)
- "Environmental education raises awareness of issues impacting the environment upon which we all depend, as well as actions we can take to improve and sustain it." (Project Learning Tree)

EE is not...

- Advocacy from a particular point of view. Rather, it focuses on examining environmental issues from different points of view, and encourages critical thinking and problem solving in advance of action.

Why have EE?

Some of the well-studied benefits of EE are:

- EE can deeply engage students in their learning, showing them applicability of their knowledge and skills into their everyday lives and communities.
- EE is cross-curricular, and can be part of teaching in many subject areas (e.g., math, language arts, social science, physical education, science).
- EE has been proven to improve test scores, and can also make learning more engaging and meaningful, for both teachers and students.
- EE can be an excellent way to incorporate Indigenous world views and ways of knowing into students' learning journeys.
- Education is the key to addressing environmental and sustainability issues.

Where's EE in the Nova Scotia curriculum?

- o EE is not explicitly included in the NS curriculum. Currently, interested, resourceful individual teachers work aspects of environmental education into their practice.
- o EE does not go against any of the goals of the Atlantic Canada Framework for Essential Graduation Competencies. In fact, incorporating EE would be in-line with learner objectives in the framework, and would support current initiatives to include more inquiry-based learning and place-based learning in classrooms (something that EE is well suited to).

What are barriers to adding EE to the curriculum?

- o In examinations of barriers for teachers in incorporating EE into their practice, the most common challenges are lack of resources, time constraints and heavy workload, and lack of institutional support. These barriers already have partial solutions in Nova Scotia.
 - There is a wealth of both EE classroom resources, and resource people, available to Nova Scotian teachers already, but many teachers are unaware of these resources at their fingertips.
 - EE can be quite cross-curricular, addressing outcomes across several subject areas through one resource or lesson, thereby reducing preparation workload for integrated curriculum teachers.

Has integrating EE into curriculum been successful in other places?

- o Yes! Ontario enacted a policy in 2009 to guide incorporation of EE into *all grades* and in *all subjects*. They crafted a set of Standards for Environmental Education, and incorporated learner expectations for every grade level, and every subject, by 2017.
- o Yes! In 2008, the British Columbia Ministry of Education developed curriculum maps to aid in teaching environmental learning and *environmental experiences* across all grade levels.
- o Both Ontario and BC introduced teachers to networks that support bringing EE into the classroom (Ontario = OSEE and BEAN, BC = EEPSA). There are similar networks in other provinces (including Nova Scotia, the ESEC), and nationally, EECOM).

What is the fit for an EE goal within EGSPA?

- Important progress on environmental challenges in Nova Scotia has been made because of the goals and timelines set out in the original EGSPA of 2007. **What** we had to do, and **when** we had to do it by, was made clear in EGSPA. However, a focus on teaching everyone **why** taking action is important, and **how** we are all connected to the natural world, has been lacking in the Act. Environmental education in the public school curriculum, as a goal in the renewed EGSPA, would help to close the environmental literacy gap in Nova Scotia.
- **To help create the citizens of tomorrow, who truly understand and strive towards sustainable prosperity, we need to provide young learners with a journey that teaches them about the environment, lets them explore their connections to it, and equips them with the skills take action in favor of sustainability, wherever they go.**

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