

ENVIRONMENTAL EDUCATION FOR SUSTAINABLE DEVELOPMENT

STATE OF PLAY AND OPPORTUNITIES

EXCHANGE OF IDEAS BETWEEN EXPERTS

Environmental challenges are at the core of students' concerns. They want their academic curriculum to reflect that reality. At Vireo, we believe in the importance of getting the word out in order to raise awareness about the challenges and solutions of environmental education for sustainable development (ESD). The panel brought together for this purpose comprises four individuals well versed in the matter. It depicts hopeful postures, programs and projects for the school system.



OUR EXPERTS

ÉMILIE MORIN

Teacher in psycho-pedagogy of vocational training at preschool and elementary school levels – Université du Québec à Rimouski (UQAR)

Her research and development work focuses on climate education, educational challenges related to the St. Lawrence River, teaching methods, and the empowerment of young people in regard to environmental issues.

SONYA FISET

Pedagogical advisor for the RÉCIT network in the field of mathematics, science and technology

Since 1997, she has been a member of the ACTES movement (collective action for environmental and social transition), as a teacher and regional officer with the Syndicat de l'enseignement de la région de Québec. She continues her commitment to education for a sustainable future by sitting on the board of the Monique-Fitz-Back Foundation since 2016.

ADAM YOUNG

Board Chair of the Canadian Network for Environmental Education and Communication (EECOM)

He is a training and evaluation specialist at the Bank of Canada Museum. As part of his graduate studies, Adam helped lead the recruitment of school boards and ENGOS in data collection for the Sustainability and Education Policy Network (SEPN) at the University of Saskatchewan.

JACQUES COOL

Educational consultant, lecturer, trainer

He has worked in education from 1984 to 2015, holding various positions: science teacher, department head, educational advisor, high school program manager, e-learning manager, student leadership coordinator, digital pedagogy specialist, online assessment specialist, and community-based school specialist. Jacques was also the first director of the CADRE21 center. He still delivers educational lectures and workshops, serves on the board of directors of the EdCan network, and acts as a partner consultant for the multinational firm Notosh Inc.

STATE OF PLAY

How to address environmental and sustainable development considerations in the classroom?

Environmental education for sustainable development (ESD) remains part of a theory-to-practice paradigm shift. For a very long time, we viewed ecology and the environmental cause as a mere topic, a general idea that underlies the concept of “nature protection.” Yet today ESD is a lever that enables community members to be in tune with the climate crisis. Far from being subject to any form of indoctrination, young people are well aware of modern environmental challenges. They want their academic curriculum to reveal the irreversible nature of potential inaction. Should we leverage education to contribute to utilitarian ends or to foster responsible citizens and critical thinkers?

Of course, ESD is a natural extension of school subjects such as science, technology, ethics and culture. What about other academic subjects? Those that are not intrinsically linked to ESD challenges? For the moment, interdisciplinarity is gaining ground and sheds light on new teaching strategies that promote commitment and critical thinking.

By definition, **interdisciplinarity** should bring together several subjects in the same project. For instance, in-class writing assignments on the topic of environment do not correspond to the model of interdisciplinarity. A well-known example of interdisciplinarity would be that of a writing assignment (first language teaching) related to historical events on a specific timeline (social studies), all with a backdrop of ESD.

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There is currently not enough content related to environmental education in our school programs. It makes no sense if we think of the climate and biodiversity crisis in which we find ourselves. This view is shared by the Québec youth—they who took the streets, who gathered to form groups, who prepared reports and wrote open letters in newspapers.

ÉMILIE MORIN

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What do the experts have to say?

As a society, we owe a debt of gratitude to those who spearhead awareness and popularization initiatives. This is mainly done by teachers and school board members, as well as other leaders in the school system. **The reach of their commitment is proportional to the attention we pay to their work.** Since their efforts often go unnoticed, and the results are not properly recognized, passing the torch can be a challenge. We must restore this commitment and perpetuate it, in a sense.

Another challenge that comes at no surprise is, of course, the management of a reasonable balance between work and study regarding environmental matters: developing an integrated approach takes time. Since the students' timetable and teachers' hours are busy, there is very little room for improvisation and for the implementation of new projects. Hence the importance of aligning the solutions—current and future—put in place by the political, economic, institutional, social and technological spheres.

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The basic idea is to engage young people to extend beyond the realm of traditional learning, to open doors and connect everything that ranges from climate change awareness and respect for nature to the very fact of living together.

SONYA FISET

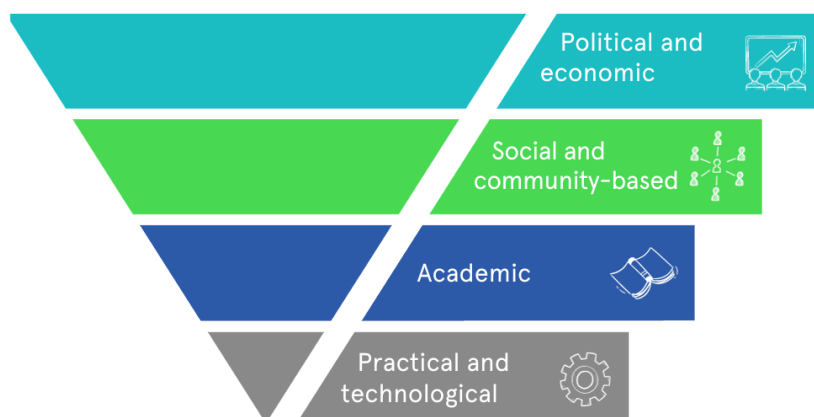
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In that regard, there are two sides to the coin of technology; even though we can use it to leverage the implementation of projects and share holistic, cross-community initiatives, there is also an adverse side to it. Access to technology, namely in terms of social media usage and cyberaddictions, deteriorated our way of life to a certain extent—the inclination to go out and play fades gradually. **The simple act of spending time outdoors is enough to reflect the importance of the environment and the issues at stake.**

What's more, where access to nature is concerned, we convey an idealistic vision of those who “truly enjoy it.” This image dies hard and discourages a large segment of the population. Think about households from lower socio-economic status. The lack of access to bodies of water, the entrance fees to national parks, the emphasis put on the quality of garments and accessories, and the judgemental attitudes toward those who do not fit in this fabricated view of reality are just a few of the reasons why many people stop from exposing themselves to the grandness of nature. It is time to bring everybody together and to **normalize all forms of action that aim to benefit from nature and better understand environmental matters.**

OPPORTUNITIES, TOOLS, POTENTIAL SOLUTIONS

This inverted pyramid highlights practical measures that, when pooled together, reveal a roadmap filled with hope—a great starting point in response to the climate crisis.



Political and economic



The governmental structure, albeit complex, involves inclusive and efficient decision-making mechanisms, as long as we feel the pulse of the interested parties. Think of Québec's Department of Education: the decisions made there have a direct impact and contribute to the implementation of supportive measures, both at school and in the community. The commitment of governmental agencies therefore provides a regulatory, formal framework for the undertaking of ESD initiatives.

- Update the Québec Education Program (QEP) periodically, proactively rather than reactively—making connections between the different study programs and school subjects.

The **QEP** is a structured set of elements ensuring the successful completion of the Québec educational project. Its implementation focuses on the acquisition and mobilization of resources that include a body of established and shared knowledge.¹

- Benefit from the visibility offered by the Canadian Network for Environmental Education and Communication (EECOM)

Composed of teachers, students, research scientists, community leaders, science popularizers and economic leaders, **EECOM** campaigns for a viable future, and implements development initiatives for environmental literacy.²

- Appoint community development officers in schools to connect with field people
- Implement a reward and recognition system to demonstrate professional commitment to sustainable development, just like a degree or certificate

¹ <http://www.education.gouv.qc.ca/en/teachers/quebec-education-program/>

² <https://eecom.org/about/role/>

Social and community-based



True backbone of society, the community is composed of individuals forming a social group and sharing common interests—in this case, environmental education. The legislative framework and proactive popularization efforts allow the community to adopt new life habits and normalize specific behaviors in order to address current issues

- Create a strong link between social justice and climate justice

While it is generally believed that even the poorest have access to nature, the truth is that outdoor activities, as they are depicted, take time, energy and money, factors that can curtail the enthusiasm of the less fortunate.

- Dispel the myth of access to nature being exclusively reserved to specific social classes
- Educate households on the proper management of residual materials
- Increase access for people from diverse backgrounds and people with any kind of disability using universal design for learning (UDL)

Universal design for learning (UDL) synthesizes the principles of free access to teach-and-learn situations while taking into account the diverse backgrounds of learners, all in an effort to encourage and maintain their involvement.

- Benefit from good neighbourly relations with aboriginal communities to acquire knowledge, traditions and habits in harmony with nature

“ There is the importance of aboriginal knowledge, and there is also the importance of building good relationships with the aboriginal communities given our shared neighbourhood. It’s important to us since most school curricula already incorporated aboriginal knowledge, mainly in terms of establishing a rapport with the earth and with the First Nations.

ADAM YOUNG

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Academic



As stated, even though school boards and teachers spearhead ESD projects, the education ecosystem may well benefit from the support of other key stakeholders. The short- to mid-term objective would be to normalize discussions on environmental challenges and opportunities, to include young people and listen to them, and give them the means to realize their ambitions, to take action.

- Put the students at the heart of their learning experience
- Lead students and teachers to extend beyond the limits of traditional learning, as long as the educational intent is clear from the very beginning
- Focus on hope and solidarity; transform achievements into use cases and models to be followed
- Treat young people as valid, credible, legitimate voices that must be heard
- Review schedules and timetables to make time for collaboration and interdisciplinarity

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We need to look at things differently, and do things differently, with boldness, with creativity, while building on educational excellence.

JACQUES COOL

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Practical and technological



Considering that the political, social and academic spheres team up to facilitate the implementation of ESD initiatives, and recognize each effort made to increase environmental literacy and raise awareness of environmental issues at all ages, the time has come to leverage technology and double down on practical measures.

- ▣ Deliver tree planting projects, establish windbreaks
- ▣ Increase the visibility of ESD projects, for instance by installing them directly in school common spaces
- ▣ Implement environmental education through outdoor learning
- ▣ Build or create outdoor learning environments
- ▣ Make the most of the connected world and gain access to the knowledge of local and global experts
- ▣ Make the learning experience visible beyond the community (podcasts, streaming, social media, etc.)
- ▣ Compare initiatives between schools across the world
- ▣ Implement progress indicators and collect the data

STAYING THE COURSE AND DISRUPTING THE STATUS QUO

How to pursue a trend that is already underway? To say that we need to “reverse the trend” would be misleading: always in a spirit of optimism and hope, we must work on what has been done by specialists and passionate people up until now.

Solutions already in place include continuing projects in interdisciplinarity, the works of the Monique-Fitz-Back Foundation, which funds creative projects related to ecology, the À l'arrêt, je coupe le moteur! initiative, school garden projects by Vireo, the ALEX project by the Association québécoise des centres de la petite enfance (AQCPE), the Sommet jeunesse sur les changements climatiques, the Sors de ta bulle campaign, and many other platforms and avenues to explore.

The interest of the next generations of citizens in terms of environmental and sustainable development will grow progressively as they deepen their knowledge of the cause. In that sense, the responsibility of higher education institutions is immense. A poor environmental education can be detrimental to students and result in ecoanxiety, a lack of understanding of the issues at stake, denial, etc. The environmental aspect of academic curricula must therefore be part of the core rather than in the fringe.

This calls for a paradigm shift focused on continuing professional development, fostering outdoor learning, and promoting individual and autonomous initiatives.

As a society, let's roll up our sleeves and map out a bright future.
It's the least we can do!

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ADDITIONAL RESOURCES

INITIATIVES ALREADY IN PLACE

Vireo

Monique Fitz-Back Foundation

Enseigner dehors, an initiative of the Monique-Fitz-Back Foundation

Sors de ta bulle, an initiative of the Monique-Fitz-Back Foundation

Parlons éducation, an initiative to highlight the importance of environmental education via forums

EXISTING TRAINING PROGRAMS

Environmental education training program, UQAM

Training programs of the Chaire de leadership en enseignement des sciences et développement durable, Laval University

RÉCIT Campus, RÉCIT

Rendez-vous pédagogiques, Lab22

Environmental education service, Environnement JEUnesse

Circular economy training program, EDUlib

Environmental & Sustainability Education in Teacher Education, EECOM

Higher specialized studies in nature-adventure intervention, UQAC

Natural Curiosity: A Resource for Educators book