

Healthy Schools, Bright Futures

Engaging students and the school community in win-win-win actions to tackle climate change, address eco-anxiety, and improve health



Image by redakter from Pixabay

By **Helen Doyle** and **Erica Phipps**, with contributions from **Lella Blumer**

AS THE WORLD MARKS the 50th anniversary of Earth Day on April 22, 2020, the devastating impacts of the coronavirus pandemic are showing us that local actions are vital to respond to a crisis that is shared across a global community. The same is true of climate change. While pandemics, climate change, and environmental degradation may feel like insurmountable challenges, the response to COVID-19 demonstrates that sustained individual and collective efforts are the only ways to overcome these global crises. And when leaders and experts provide clear evidence-informed guidance and policies, communities can implement solutions that bring immediate health protection, build community, and create a future that is equitable, healthy, and sustainable for generations to come. Working together, we can turn the tide of climate change, sustain health and well-being, and nurture a sense of hope.

These are stressful times for our children and youth. Already concerned with the looming consequences of climate change, students have had to cope with physical distancing and school shutdowns triggered by the coronavirus pandemic. Now more than ever, we need to cultivate a sense of empowerment by engaging young people in actions they can control and be proud of.

Each year, Canada celebrates Healthy Schools Day (HSD) — a day to take action and celebrate the efforts of students, educators, decision-makers, and school communities to make learning environments healthier and more sustainable. Led by the Canadian Partnership for Children’s Health and Environment (CPCHE), each Healthy Schools Day has a thematic focus. Recent campaigns have addressed radon and diesel bus emissions. Next up is climate change.

But climate change is too big of an issue and far too important to tackle with just one ‘day.’ For that reason, and recognizing that educational professionals and families are understandably focused on staying safe amidst the COVID-19 crisis, we are dedicating an entire year to supporting a nationwide gearing up of efforts in schools and early learning programs to take action on climate change. Why? Because halting the rise in greenhouse gas (GHG) emissions is essential to our collective future. Because taking even simple actions can help keep us all healthier now, while contributing to lower carbon footprints and helping us realize the many bonuses to children’s health and well-being of spending time in greener and cleaner environments. And because taking action, together, is the best way to inspire hope and protect the right of our young people to dream of a bright future.

The challenge

Climate change is presenting real and immediate risks to

communities around the world, and Canadians and Americans are not immune to these risks. Heat-related health impacts, deteriorating air quality, vector-borne diseases, food insecurity, injury and illness from extreme weather events such as flooding, heightened anxiety, and exacerbation of health inequities have all been associated with climate change. Extended, warmer seasons have already contributed to the spread of the tick that transmits Lyme disease, with the reported number of cases in Canada having increased from 144 in 2009 to 2025 in 2017.¹ Longer and warmer seasons increase air pollution risk from forest fires, smog-forming chemical reactions, and pollen — all common asthma triggers. From 2015 to 2016 there were over 6,000 asthma hospitalizations among children and youth in Canada.² Climate change is expected to double or triple the number of extremely hot days in some parts of Canada in the next 30 years.³ In the City of Toronto alone, heat contributes to an average of 120 premature deaths each year.⁴ The mental health impacts of climate change and eco-anxiety — the fear and anxiety experienced by the overwhelming challenge of climate change — are very real.⁵ Children are among the most vulnerable to climate-related mental health impacts.⁶ Health professionals are already seeing these climate-related health impacts and are calling on governments to commit to concrete climate actions.⁷

Canada's Changing Climate Report (released in 2019) states that, on average, warming in Canada is double that of global warming⁸ and warns that effects of rising temperatures are projected to intensify — with increased severity of heat waves, increased drought and wildfire risks, and increased urban flood risks from more intense rainfall. The Report highlights the urgent need to take climate action now — noting that “limited” global warming will only occur if nations around the world, including Canada, drastically and rapidly reduce carbon emissions.⁸

There is scientific consensus that climate change is caused by global GHG emissions largely driven by human activity.

While Canada's emissions represent a small percentage of global emissions, it is one of the highest per capita emitters. The major sources of GHG emissions in Canada are the oil and gas sector (27%), the transportation sector (24%), and buildings (12%), with the electricity sector, industry, and agriculture each accounting for approximately 8–10% and waste accounting for 3%.⁹ Each one of us can take steps to reduce emissions, but it will take decisive action by all of us — government decision-makers, industry, business, the building and development sector, agricultural leaders, individuals, and communities — to bring about the changes needed to attain Canada's 2050 net-zero emissions goal.

Response to climate change requires both **adaptation** measures to ensure that our communities are resilient to the impacts of climate change and **mitigation** measures to reduce GHGs in order to slow the rate of global climate change and lessen its impacts. To be effective, such actions must be rapid, aggressive, and sustained — and they require collective efforts and political will.

The solutions

The many partner organizations involved in Healthy Schools Day are working together to provide ready-made options that educators, administrators, and young people can use or adapt in designing HSD actions for their schools and local communities. A menu of campaign ideas, resources, and information can be found on the HSD website at www.healthyschoolday.ca. As the year progresses towards the culminating event on Healthy Schools Day in Spring 2021, we will be encouraging schools and youth to share their ideas and successes via social media.

Here are just some of the evidence-informed climate solutions that educators and the broader school community can undertake. These are win-win-win actions as they help to reduce GHGs, while also providing health and societal benefits.



Image by redakter from Pixabay



Image by F. Muhammad from Pixabay

Adaptation — Building climate-resilient school communities

Building resiliency is a climate adaptation measure. It starts by ensuring that our school communities are aware of the local risks and health impacts of climate change, that we all understand the vulnerabilities, and that we are prepared to respond. For example, a climate adaptation measure relating to extreme heat and air quality could include a school policy of checking Extreme Weather Warnings and Air Quality Health Index forecasts and using these advisories to guide decisions about outdoor activities. Does your school community reschedule outdoor events when a heat warning has been issued? Does your school provide adequate shade to protect students and school staff from heat and sun exposure? These measures can reduce heat-related health risks and sun exposure. They can also help reduce GHG emissions if natural shade provides the sun and heat protection (as trees absorb carbon).

Part of building resilience is providing school communities with social and psychological supports to address the fear, grief, and other emotions arising from eco-anxiety. Educators have a unique opportunity to connect with children and youth about climate change in a variety of ways: through the curriculum; by direct observation in outdoor education; and in group or personal discussions about students' questions, concerns, and hopes for their collective future. Along with current, fact-based sources of information, it is crucial for educators to have the resources to address their own eco-anxiety as well as that of students in a supportive and constructive way.

There is substantial evidence that focusing on efforts that are having a positive impact on climate change and taking action, individually or collectively, can alleviate anxiety and the feeling of being overwhelmed by negativity.^{10, 11, 12, 13} Constructive action allows students of all ages, interests, and abilities to be part of collective projects that contribute to solutions. These projects may include organizing campaigns; expressing messages through theatre, music, art, or

dance; petitioning the school board or municipality for policy changes; and educating other groups in the community. Actions such as those suggested in the next section are being taken by school communities across Canada, and they are making an impact.

Mitigation — Countdown towards net-zero emissions

While broad-scale aggressive action is needed to achieve net-zero greenhouse gas emissions, there are things that individuals and communities can do to directly and/or indirectly reduce emissions and mitigate climate change. Reflecting on the sectors in Canada that contribute significantly to GHG emissions — energy production, transportation, buildings, food production, and waste — think about how your actions and those of your school community can accelerate the countdown to net-zero. These could be measures to reduce your own carbon footprint, or advocacy efforts to support policies on climate action within your own school board and at all levels of government.

Here are some suggestions for climate actions that can be led by the school community and involve educators and the student body. These are also win-win-win actions as they reduce GHG emissions, protect our planet, and provide multiple health benefits for you and your school community.

- ◇ Get active and choose low-carbon [school] travel options
 - » Supporting active and sustainable transportation systems reduces GHG emissions from transportation sources. Consider encouraging/implementing policies on active transportation, school travel planning, Active & Safe Routes to School (<http://www.activesaferoutes.ca/>), and anti-idling of buses and personal vehicles. Public transportation and zero emissions vehicles are other sustainable choices.
 - » *Bonus health benefits!* — Improved local air quality, reduced air-pollution-related health impacts such as

Looking for ideas and resources to help your students and school community engage in climate action?

Check out the

Healthy Schools Day in Canada website

healthyschoolsday.ca / lajourneesecolesensante.ca

Got a cool project or curriculum idea to share? Post it on social media using [#HSDClimateAction](https://twitter.com/HSDClimateAction)



Photo: Health Center for Neighborhood Technology (<https://hcnk.org/p/772403/>)

asthma, increased physical activity, reduced traffic-related injuries.

- ◇ Use energy wisely and promote renewables
 - » Implementing energy conservation measures such as turning off lights and computers when not in use, and adjusting the thermostat are energy-wise decisions. Encouraging energy efficiency measures such as building envelope retrofits and ventilation upgrades will also help reduce demand for electricity generation. Promoting renewable energy such as solar and wind power will help accelerate the transition to clean energy sources — and they could be part of an interesting science project!
 - » *Bonus health benefits!* — Improved indoor and outdoor air quality, improved thermal comfort
- ◇ Choose plant-based foods and litter-less lunches
 - » Supporting sustainable food systems can reduce GHG emissions from food and agricultural sectors by encouraging/implementing policies that
 - increase consumption of, and access to, plant-based diets as per Canada’s Food Guide for healthy eating,
 - reduce food waste,
 - promote composting, and
 - reduce single-use food packaging waste and the use of plastics.
 - » *Bonus health benefits!* — Improved healthy eating, improved air quality, improved food security, reduced exposure to plastics-related chemicals
- ◇ Plant it for the planet
 - » Greening school grounds and protecting natural ecosystems increase carbon sequestration and contribute to climate adaptation. Supporting policies on school yard greening, organizing a tree planting campaign,

participating in community gardens, or “de-paving” and greening school grounds are great ways to involve students, educators, parents, and the broader school community.

- » *Bonus health benefits!* — Reduced heat-related illness, reduced UV exposure, improved air quality, improved mental health
- ◇ Talk to your students about it and make your collective voices heard!
 - » Join your students in participating in a climate action event; encourage them to write to elected officials or attend local council meetings to find out what is happening in their communities; urge your school to support climate action; or just talk about climate change with your students, families, and friends.
 - » *Bonus health benefits!* — improved mental health and social cohesion

As we commemorate Earth Day, and as countries around the world struggle to cope with the acute challenges of the COVID-19 pandemic, we continue to face the sobering reality that the planet is warming, ecosystems are threatened, and our health is already being affected because of climate change. **Climate action is the solution**, but it will take collective effort. Taking tangible action is necessary; it is also the solid footing that our young people need to feel empowered and hopeful.

In looking ahead to the 2020–2021 school year, the HSD partners will be working hard to offer practical tools and ideas to support you, as educators and administrators, to engage with young people in taking action and advocating for a brighter future — in ways that make sense within your local community. While we all embark on this climate-focused HSD campaign, we want to hear from you, via social media, to generate a coast-to-coast-to-coast sharing of ideas and commitments. So, check out the Healthy Schools Day website, sign up to the HSD listserv, talk with others, share

your ideas on how to integrate climate action with students' learning and discovery, and, most importantly, create the space for young people to generate ideas and build momentum. And then join us for Healthy Schools Day 2021 as we celebrate a country-wide bounty of ideas, momentum and actions to tackle climate change. For a brighter, healthier future.

Helen Doyle serves as the Environmental Health Work Group Chair for the Ontario Public Health Association (OPHA). **Erica Phipps** is the Executive Director of the Canadian Partnership for Children's Health and Environment (CPCHE). **Lella Blumer** is an organizer with For Our Kids, a network of parents involved in climate action.

Additional Resources

Looking for ideas and resources to help your students and school community engage in climate action? Check out the HSD website at www.healthyschoolsday.ca / www.lajournee-desecolesensante.ca.

For more information on how to protect children from the health impacts of climate change, check out OPHA's climate action campaign: www.makeitbetterontario.ca.

Got a cool project or curriculum idea to share? Post is on social media using #HSDClimateAction.

Endnotes:

- Ogden, N.H., Bouchard, C., Badcock, J. et al. What is the real number of Lyme disease cases in Canada? *BMC Public Health* 19, 849 (2019). <https://doi.org/10.1186/s12889-019-7219-x>

- Canadian Institute for Health Information. (n.d.). Retrieved from <https://www.cihi.ca/en/asthma-hospital-stays-by-children-and-youth>
- Climate Atlas*. (n.d.). Retrieved from https://climateatlas.ca/map/canada/plus30_2030_85#lat=47.61&lng=-88.51&city=449
- McKeown, Dr. D. *Protecting vulnerable people from health impacts of extreme heat*. (2011, July 6). Toronto Public Health. Retrieved from <https://www.toronto.ca/legdocs/mmis/2011/hl/bgrd/backgroundfile-39468.pdf>
- Canadian Mental Health Association. (2019, October 17). Retrieved from <https://cmha.ca/blogs/eco-anxiety-despair-is-rising>
- Hayes, Katie et al. Climate change and mental health: risks, impacts and priority actions. *International journal of mental health systems*, 12(28). 1 Jun. 2018, doi:10.1186/s13033-018-0210-6 <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC5984805/>
- Canadian Medical Association. (2019, November 14). Retrieved from <https://www.cma.ca/news/its-time-own-our-climate-impact-lancet-report-finds-canadas-health-care-sector-contributing>
- Canada's Changing Climate Report. (2019). Retrieved from <https://changingclimate.ca/CCCR2019/chapter/headline-statements/>
- Environment and Climate Change Canada*, (2019, April), Canadian Environmental Sustainability Indicators: Greenhouse gas emissions, ISBN: 978-0-660-30369-7 (pb), Retrieved from <https://www.canada.ca/content/dam/eccc/documents/pdf/cesindicators/ghg-emissions/2019/national-GHG-emissions-en.pdf>
- Cuttler, M., (2019, September 21). *Eco-anxiety spurs youth to take action on climate change*. Retrieved from <https://www.cbc.ca/news/health/eco-anxiety-1.5291500>
- Clayton, S., Manning, C., Krygsmann, K., and Speiser, M. (2017, March). *Mental Health and Our Changing Climate: Impacts, Implications, and Guidance*. Retrieved from <https://www.apa.org/news/press/releases/2017/03/mental-health-climate.pdf>
- Handbook of Climate Psychology. (2018, November 16; Revised 2020, March 3). Retrieved <https://www.climatepsychologyalliance.org/handbook/304-coping-and-defences>
- Elks, S. (2019, September 19). *Children suffering eco-anxiety over climate change, say psychologists*. Retrieved from <https://www.reuters.com/article/us-britain-climate-children/children-suffering-eco-anxiety-over-climate-change-say-psychologists-idUSKBN1W42CF>

A GUIDE TO INVASIVES AND THE ENVIRONMENT



Provides a tool kit for youth educators. Green Teacher's new book offers innovative perspectives, program ideas, games and activities that young students (6-19) need.

This book includes innovative, youth education programs, and ready-to-use activities appropriate for various age groups.

Print: US/CA ~~\$18.95~~ \$14.95

*Bulk prices are also available.

To order and for more information, visit us at greenteacher.com or please contact us at 1-888-804-1486 or info@greenteacher.com.

