

Some resources in no particular order suggested by Dr. Robin Cox, Royal Roads University

1. En-ROADS is a freely-available online simulator that provides policymakers, educators, businesses, the media, and the public with the ability to test and explore cross-sector climate solutions.
<https://www.climateinteractive.org/en-roads/>
2. The Climate Atlas – and the Climate Atlas student handbook <https://climateatlas.ca/educator-resources>
3. Chapter 3 A Whole Institution Approach to Climate Change Education: Preparing School Systems to Be Climate Proactive. In: [Curriculum and Learning for Climate Action](#) Authors Hargis, K., McKenzie, M., & LeVert-Chiasson, I., pp. 43-66. https://doi.org/10.1163/9789004471818_004
4. The Sustainability and Education Policy Network (SEPN) *Responding to climate change : A primer for K-12 Education*.
5. Climate Ready BC: Preparing together for educators
https://www2.gov.bc.ca/assets/gov/environment/climate-change/adaptation/resources/cpas_educators_leaflet.pdf
6. Climate change resources for students and teachers
<https://www.common sense.org/education/lists/climate-change-resources-for-students-and-teachers>
7. Educators for 4SC equips teachers with resources to develop their students' capacity to become effective civic leaders who write persuasively, speak passionately, and actively participate in the creation and dissemination of ideas

Teaching about Climate Change with lesson plans, articles, videos and other resources
<https://educators4sc.org/teaching-about-climate-change/>
8. Yale program on climate communication for educators grades 6-12
<https://climatecommunication.yale.edu/for-educators/>
9. Nova programs climate science resources including topics focused on climate change and health; wildfire management etc. (Grades 6-12)
10. Pembina institutes -Climate Change Awareness and Action Education Kit
<https://www.pembina.org/pub/9>
11. taking on climate change: a teaching companion for educators in Nova Scotia (2013)
https://www.novascotia.ca/nse/climate-change/docs/AppendixC_ClimateChange_TeachingCompanion.pdf
12. Worlds Largest Lesson Resources
https://worldslargestlesson.globalgoals.org/resources/?_sft_language=english
13. Resilience By Design (<https://resiliencebydesign.com/>) Lab's [Navigating Meaningful Youth Engagement in Disaster Risk Reduction](#) (can be used equally well for climate change focus). Outlines a design thinking process (Resilience SIL) and principles guiding youth engagement (4P Framework) with accompanying activities to support youth designing resilience solutions in their schools and communities.
14. [UNESCO Getting Climate-Ready: A guide for Schools on Climate Action](#)

TABLE 2 TEACHING CLIMATE CHANGE IN EVERY SUBJECT

Consider these examples of how you can teach climate change in every subject. Which examples make sense for your school or for your class? Can you think of any other ways you can help your students to understand and take action?

SUBJECT	EXAMPLES
Agriculture/gardening	<ul style="list-style-type: none">▶ Design and maintain a school garden and compost▶ Interview local farmers, male and female, to learn how climate change affects them
Arts - Visual and Performing	<ul style="list-style-type: none">▶ Create posters showing the impacts of climate change▶ Analyze songs with environmental themes or messages
Biology	<ul style="list-style-type: none">▶ Examine how climate change affects the spread of diseases such as malaria▶ Measure biodiversity in the school yard or local community
Civics/Citizenship	<ul style="list-style-type: none">▶ Interview local government officials about their actions to address climate change▶ Plan a community clean-up of a local beach or park
Geography	<ul style="list-style-type: none">▶ Do field trips to examine the causes and effects of urban sprawl▶ Create maps showing areas of the world most at risk due to climate change
Health and Physical Education	<ul style="list-style-type: none">▶ Show respect for the environment when hiking on trails around the school▶ Examine the health risks associated with environmental factors such as air pollution▶ List the environmental benefits of healthy practices such as active transportation
History	<ul style="list-style-type: none">▶ Examine how societies throughout history have resolved conflicts and responded to environmental challenges▶ Research traditional ecological knowledge and consider how it might apply to local sustainable development issues
Language and Literature	<ul style="list-style-type: none">▶ Practice the communication skills needed to speak out about local and global issues▶ Write poems and stories in response to photos or videos about climate change
Mathematics	<ul style="list-style-type: none">▶ Make graphs to show changes in school energy use▶ Calculate statistics, disaggregated by sex, on poverty and malnutrition at the local and global levels,
Science and Technology	<ul style="list-style-type: none">▶ Investigate the natural and human factors that influence the climate▶ Assess the social, environmental and economic impacts of common chemicals
Vocational and Technical Education	<ul style="list-style-type: none">▶ Use workplace safety measures that protect the health of female and male workers and the environment▶ Identify technological solutions that address social and environmental concerns▶ Include environmental and social responsibility in the design of a product

Whole Institution Approach

Planning
Climate Action

Working with
Community to
Prepare for
Climate Change



Including
Climate Change
Education in All
Subjects

Facilities that
Mitigate and
Adapt to
Climate Change

What Schools Can Do Now in Each of the Four Whole Institution Areas

GOVERNANCE

- Incorporate sustainability and climate change into school policies
- Environmental committees can raise awareness about environmental issues
- Student committee members can research environmental topics then educate other students and teachers
- Include solar panel installation, reusable water bottle procurement and other school level initiatives into governance and funding decisions
- Hold environmental awareness and action campaigns for students and staff
- Establish funding partnerships and apply for grants to support initiatives
- Provide funding to students to implement interdisciplinary research projects to improve school or community sustainability

TEACHING & LEARNING

- Integrate education for sustainable development across entire curriculum
- Hold school-wide challenges to reduce climate change
- Develop classroom- and school-level projects on climate change
- Extend learning outside the classroom through community partnerships
- Incorporate learning about Indigenous cultures, the environment, and climate change for students
- Have students research local actions for reducing the community's impact in relation to climate change
- Hold workshops and conferences on sustainability and climate change-related topics
- Foster connections to place by bringing classes outside

COMMUNITY PARTNERSHIPS

- Develop a website to track school's whole institution approach and support monthly climate change challenges
- Collaborate with other schools, neighborhood associations, local businesses, local organizations, and networks on climate action
- Students can learn about reducing emissions then teach others, including their families, about eco-friendly lifestyles
- Students can collaborate with partners based on a real-life need of an environmental group
- Can establish and care for school gardens with community partners
- Students can work with partners to host climate-related community events

FACILITIES & OPERATIONS

- Plant native flowers, trees, fruits, and vegetables
- Buy products that are local and made ethically
- Turn off lights and electronics when not in use
- Encourage staff and students to bring litter-less lunches and conserve water
- Establish student-led recycling and compost programs and teach proper waste sorting
- Install solar panels and water bottle fountains
- Cook with local products in the cafeteria
- Host Carbon Reduction Challenges to encourage staff and students to find more eco-friendly methods of transportation