



CIGI Global Youth Forum - 2016 11 25

Climate Change/Sustainability

Pre-learning Package: Lesson Plan

Learning Goal:

Students will be able to appreciate the complexity of responding to climate change by describing the causes and impact of the crisis (e.g., fossil fuels, greenhouse gasses), expressing the interdependent systems that contribute to the issue (i.e., legal, social, economic), and predicting potential responses and the perspectives from which they arise (i.e., mitigation vs. adaptation).

Timing:

One to two periods (76-152 minutes)

Minds On:

1. Students will respond to the prompt by noting ideas on three graffiti walls: *what do I know about climate change with respect to cause, impact, response?*
2. Students will view the video clip considering what affirms and challenges the prior responses: *Climate Change 101 with Bill Nye* (4:09).
3. Teacher will prompt students to consider other consequences of climate change beyond those environmental impacts noted in the video (e.g., climate refugees and migratory change, the spread of tropical diseases beyond traditional borders, food security, scarcity, and cost) and questions they may wish to investigate.
4. Teacher will identify the learning goal and place it in the context of student responses as a transition to the new learning.

New Learning*:

See teacher notes

1. Teacher will introduce three systems of human interaction and organisation that can guide an approach to understanding issues such as climate change (i.e., legal, social, economic) via a Venn diagram and students will offer their understanding of those terms. Teacher will supplement and/or amend student understandings with the following definitions:
 - a. Legal: *this system encompasses laws and agreements that operate at an international, national, and local level. It can be characterised by trade compacts, carbon taxes, or the development of public transit.*
 - b. Social: *this system encompasses the impact on humans and the ways in which we group ourselves whether equitably or inequitably. It can be characterised by migratory patterns, ethnic groups who may be disproportionately impacted by climate change, or the voice of people in governance and public policy.*
 - c. Economic: *this system encompasses finances and other forms of incentive that promote or discourage particular behaviours. It can be characterised by border carbon taxes, consumerism and reduction of consumption, or the development of green economies.*
2. Students will review the infographic and identify examples of each of the three systems and how they are engaged with respect to climate change: *Moves to Climate-Proof the Planet*. Teacher may extend the learning by prompting students to consider how one system might interact with another.
3. Students will view the video clip and note a definition for adaptive responses and mitigative responses, providing examples of each: *Adaptation and Mitigation: Climate Wisconsin*

Consolidation:

1. Students will review the three appended resources and identify:
 - a. Key impacts and consequences
 - b. How interdependent systems are engaged
 - c. Whether it represents an adaptive, mitigative, or hybrid response.

Blog post: "Why 'One Humanity' Must Include Climate Refugees" by Basil Ugochukwu

Video clip: "Climate Change is About Power" by 350.org (2:18)

Infographic: "Protecting the Planet starts with you"

| | |
|--|--|
| <p><u>Teacher Notes:</u></p> <p>*Depending on the readiness of students and prior learning in your course, teacher should use discretion about whether to focus on identification of systems (i.e. economic, legal and social) or the interdependence of systems.</p> <p><i>Teachers are encouraged to enter into the learning sequence at whatever point best meets the readiness of students or curricula focus. The lesson can be amended freely to meet student needs.</i></p> <p><i>Teachers interested in exploring the interdependence them in greater depth may direct students the following Globe and Mail article:</i> http://www.theglobeandmail.com/report-on-business/industry-news/energy-and-resources/wto-ruling-may-pull-the-plug-on-ontarios-green-energy-rules/article5288353/</p> | <p><u>Resources:</u></p> <p><i>Climate Change 101 with Bill Nye:</i> https://www.youtube.com/watch?v=EtW2rrLHs08</p> <p><i>Moves to Climate-Proof the Planet -</i> https://newint.org/features/2012/05/14/451-26-infographic-72ppi-2000x1414b.jpg</p> <p><i>Adaptation and Mitigation: Climate Wisconsin</i> https://www.youtube.com/watch?v=QjnV8-oo12A</p> <p>"Why 'One Humanity' Must Include Climate Refugees" by Basil Ugochukwu https://www.cigionline.org/blogs/global-rule-of-law/why-one-humanity-must-include-climate-refugees</p> <p>"Climate Change is About Power" by 350.org https://www.youtube.com/watch?v=m95K7LCII C4</p> <p>"Protecting the Planet Starts with You" by National Oceanic and Atmospheric Administration http://oceanservice.noaa.gov/ocean/earthday-infographic-large.jpg</p> |
|--|--|



CIGI Global Youth Forum - 2016 11 25
Climate Change/Sustainability
Post-learning Package

| |
|--|
| Critical Conversations on Climate Change |
| Simulation Descriptors |
| Online Fora |
| Learning Opportunities |
| Resource List |



CIGI Global Youth Forum - 2016 11 25

Climate Change/Sustainability

Post-learning Package: Critical Conversations on Climate Change

Learning Goal:

Students will engage in a discovery process that extends their learning from the Global Youth Forum 2016 by considering further effects of and responses to climate change and sustainability. Students will engage in a critical conversation that responds to an enquiry question(s) through a thoughtful and in depth reading of the provided resources.

Timing:

One to two periods (76-152 minutes)

Success Criteria:

Student demonstrates:

1. A robust understanding of the enquiry question.
2. The ability to engage with the provided resource using the enquiry question.
3. Synthesises concepts and ideas in response to the enquiry question.
4. Student is able to draw and communicate conclusions related to the enquiry question.
5. Student is able to ask critical questions in conversation with peers while using active listening.

Sequence of Learning:

1. As a class, students will describe key concepts, ideas, or new learnings that arose from the Global Youth Forum.
2. Teacher will suggest that the critical conversations seek to extend and amplify the learning by asking students read academic research related to the same topics, to organise their individual thoughts, and to engage in a discussion with three peers finding points of consonance, dissonance, and evaluating the significance therein.
3. Students will be assigned a paper to read as well as an enquiry question(s) to guide their reading and further questions to guide their discussion (see resource 1 for links to papers, resource 2 for enquiry question(s)).
4. Students will independently read and assess their paper and prepare to share their thoughts and conclusions (both of the style and the substance of the paper) in the conversations.

Sequence of Learning (cont.'d):

5. Students will come together and take turns sharing their ideas, responding to the questions for discussion, and engaging actively with one another by citing evidence from the paper to support their conclusions. The overall goal is not for students to formally present in turn, but rather to develop a conversation naturally that finds space to consider all resources and allows all students to share their ideas.
6. Students will assess their engagement in the conversation and consider opportunities for improvement in future activities.

Resources:

Resource 1:

"Limiting Dangerous Climate Change" by David Estrin

"Climate Change and Human Rights" by Basil Ugochukwu

"Closing the Gap Between Canadian Emission Targets and Performance" by Jeff Rubin

"The End of the Beginning: Paris COP 2015" by David Runnalls

"The Internationalization of Indigenous Rights" Special Report (teacher will need to select chapters)

Resource 2:

Question for reading -

In what ways might the paper represent an adaptive, a mitigative, or a hybrid response to an aspect of climate change and sustainability?

Question(s) for discussion -

In what ways might my paper challenge or affirm the evidence and conclusions of that of my peers?

In which areas might there be gaps in the evidence and/or analysis found in all of the papers when considered together?

In what ways might the papers challenge my preconceptions or prior learning?

In what ways might papers and the conversation call me to individual or group action?

Teacher Notes:

The papers provided are suggestions. Teachers should feel free to find resources that suit the needs and abilities of the students, or allow students to find additional resources to supplement the discussion. Papers are available at cigionline.org or in the resource list.



CIGI Global Youth Forum - 2016 11 25

Climate Change/Sustainability

Post-learning Package: Simulation Descriptors

Extreme Event

The focus of the simulation is on building community coalitions in preparation for and response to natural disasters. A four minute [“trailer”](#) helps to explain the key components of the simulation (i.e., Prepare, Respond, Recover, Adapt). This simulation is suitable for 12 - 48 players and requires approximately one hour to play. The website recommends starting to organize materials several weeks in advance of playing the game. It provides both “high-tech” and “low-tech” options.

World Climate Simulator

In this activity students can take the roles of different countries in a mock UN negotiation on climate change. The students will learn how to take a multi-systems approach (e.g. health, equity, disaster risk reduction, resilience) to solve the problem. The simulation software allows students to get quick, real-time feedback regarding the impact of their choices and to see if their decisions will slow down the Earth’s rate of warming keeping it below the 2 degree Celsius level. The website provides different activities to use the simulator. It also provides instructional videos and other resources to help teachers prepared the activities for their classrooms.



CIGI Global Youth Forum - 2016 11 25
Climate Change/Sustainability
Post-learning Package: Online Fora

Social Media

Students and teachers are encouraged to continue the conversation on climate change via Twitter using #CIGLIVE. Ideas for posts may include: links to articles and videos, questions, comments on #CIGLIVE, etc. Other Twitter hashtags to follow: #climatechange, #climate, #globalwarming, #environment, #water, #climateaction, #itstimetochange, #parisagreement.

Commented [1]: Not sure if we should have a post hashtag or use the same hashtag as the day of the forum...whatever makes sense.

Dear Tomorrow

This website provides a space where people can write letters, post photos and videos about what they are doing/will do regarding climate change. The messages will be archived and shared with future generations in 2030 and 2050.

Google Hangouts / Skype

Teachers are encouraged to connect students/classes who participated in GYF16 via Google Hangouts or Skype. Virtual meetings could allow students to present reflections on GYF16 as well as any further study that they have undertaken since the forum. Additionally, students may be able to collaborate on future projects related to the topic.

Commented [2]: Tom/Colleen: we're wondering if there could be something in place that would allow teachers who are interested to share their contact details with one another? Could be something as simple as a sign-up sheet -- pen and paper -- on the day or a check box when teachers sign-up online.



CIGI Global Youth Forum - 2016 11 25

Climate Change/Sustainability

Post-learning Package: Learning Opportunities

1. Sharing and Implementing Solutions

Identify a climate change related problem/challenge in your school or school community (e.g. excess of electricity, parents waiting for to pick up students with their cars running) and come up with a creative solution. Share ideas, vote on the best and then make it happen.

2. Taking Action

Students make a list of actions they can take as individuals (e.g. walking to school, reducing the use of electronics, purchasing local food, upcycling). Do the same for actions for the school as a whole or the surrounding community. Discuss, debate and decide on the top three actions to commit to and make an advertising campaign to get the target audience on side.

3. Create a PSA

Create a public service announcement about a topic related to climate change (e.g. Climate Refugees, reduction in biodiversity) and the need to take action to prevent a potential cause of the situation. Students should choose a specific cause and geographic location (flooding in Baton Rouge, drought and flood conditions in Yemen)

4. [Climate Change Survival Activity produced by Peel Region](#)

This survival activity provides students with the opportunity to work collaboratively to develop critical thinking skills. They will be asked to link a series of climate change events into a logical sequence that incorporates mitigating and adapting to the impacts of climate change events

Post-learning Package: Learning Opportunities (cont.'d)

5. Tracking Your Carbon Impact

Track your school's climate impact. High school students can investigate the link between everyday actions at their high school, greenhouse gas emissions, and climate change. Students can learn about climate change, estimate their school's greenhouse gas emissions, and identify ways to mitigate their school's climate impact. Students gain detailed understandings of climate-change drivers, impacts, and science; produce an emission inventory and action plan; and can even submit the results of their emission inventory to their school district. They can also use [Portfolio Manager](#) to compare the energy use of your school with other schools nationwide, and earn the ENERGY STAR for your school if it qualifies as a top performer.

6. Upcycle Products

This website provides a lesson, assessment, resources, and examples to support the design and creation of upcycled projects. This could work well for a classroom or entire school community contest (e.g., run by Ecoschools).

<http://www.thecreativeeducator.com/2015/lessons/upcycle>

7. Art+Climate=Change

This organization is using art (including the visual arts, music, theatre, dance, literature, architecture, and cinema) to provoke, inspire, motivate a response to issues of climate change. Students could create an artistic response to new learning from the day with the aim to inspire dialogue and action from the class, school or local community (e.g., partnering Ecoschools and Arts Club/Department).

<https://climarte.org/>

8. Essay Contest

(either CIGI Lieutenant Governor Essay Competition OR class/school community run)

There is the possibility that CIGI will launch a Lieutenant Governor of Ontario Essay Competition with Climate Change as its theme. Students will be asked to imagine it is 2067 and Canada is celebrating 200 years of confederation.

"Looking back over the last 50 years, tell us your story of how Canada stopped using fossil fuels and built a zero-carbon economy."

Word Limit: 1000 words

Submission Date: TBD

Format: Word and/or pdf

Commented [3]: Tom/Colleen - adapt based on CIGIs decision to move forward and timelines



CIGI Global Youth Forum - 2016 11 25
Climate Change/Sustainability
Post-learning Package: Resource List

CIGI Papers

Basil Ugochukwu

[Climate Change and Human Rights: How? Where? When?](#)

David Estrin

[Limiting Dangerous Climate Change: The Critical Role of Citizen Suits and Domestic Courts - Despite the Paris Agreement](#)

Jeff Rubin

[The Future of Canada's Oil Sands in a Decarbonizing Global Economy](#)

David Runnalls

[The End of the Beginning: Paris COP 2015](#)

Special Report

[CIGI The Internationalization of Indigenous Rights: UNDRP in the Canadian Context](#)

CIGI animations

[Taxing Carbon for a Greener Economy](#)

Video Clips

[Climate Change is About Power](#)

[Carbon Pricing explained with Chickens](#)

[The Price of Carbon](#)

[The Story of Cap and Trade](#)

[How I Fell in Love with a Fish](#)

[A Foie Gras Parable](#)

Infographics

[5 Reasons Why Carbon Pricing is the Future](#)

[How Carbon Pricing Works](#)

Films with Educational Resources

Sea Blind

<http://www.seablind.org>

[Movie Trailer](#) (2 min. 36 sec.)

This Changes Everything

<http://thischangeseverything.org/>

[Movie Trailer](#) (2 min. 22 sec.)

Revolution

<http://therevolutionmovie.com/>

[Movie Trailer](#) (1 min 59 sec.)

Racing Extinction

<http://racingextinction.com/>

[Movie Trailer](#) (2 min 39 sec.)

Music

[Songs about Climate Change](#)

Articles

[Carbon Tax or Cap and Trade?](#)

Community Connections

*Tom to help populate once he establishes connections

[Divest Waterloo](#)

[Blue Dot Movement](#)

[Citizens Climate Lobby](#)

[Sustainable Waterloo Region](#)

Commented [4]: More work for Tom :)



CIGI Global Youth Forum - 2016 11 25
Climate Change/Sustainability
Descriptor for Website

Global Youth Forum

Friday, November 25, 2016 - 8:30am - 2:30pm
CIGI Campus, 67 Erb Street West, Waterloo, Ontario, N2L 6C2, Canada
Public Event
[Event Description](#)

The CIGI Global Youth Forum is a combination of trans-media storytelling, classroom simulation, and panel discussion for groups of high school students. For more information, please email events@cigionline.org. Presented by CIGI and the Balsillie School of International Affairs, high school students are invited for a free, one-day Global Youth Forum on global peace and security, development and human rights issues. Registration for this year's Global Youth Forum will open on September 1st, and all students should register through their teacher/school representative.

2016 THEME: Climate Change & Sustainability in a Global Context

This year's theme is climate change & sustainability in a global context.

Students will be able to appreciate the complexity of responding to climate change by describing the causes and impact of the crisis (e.g., fossil fuels, greenhouse gasses), expressing the interdependent systems that contribute to the issue (i.e., legal, social, economic), and predicting potential responses and the perspectives from which they arise (i.e., mitigation vs. adaptation).

Students will engage in a variety of learning venues including a plenary address, breakout speakers, simulations, and panel discussion. Lunch will be provided and students will have an opportunity to engage with local community groups responding to the issues.

Capacity for this event is limited to 250 students.