

TEACHABLE BOOKS

Global Issues: Climate Change

By Carlo Fusco

GRADE LEVEL: Secondary (11-12)

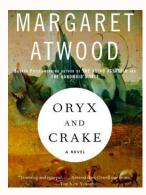
THEME: Global Issues

SUB-THEMES: Climate Change

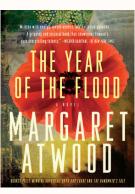
LEARNING FOCUS

Climate change is an existential crisis that is challenging everyone and has generated a new genre called "Cli-Fi." Using climate change as a focus, authors delve into many other global issues such as, genetics, disease, equity and social order, just to name a few. Our learning focus will be to use the climate crisis in works of fiction to explore a speculative future founded in today's environmental/social/political issues.

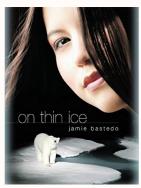
FEATURED BOOKS



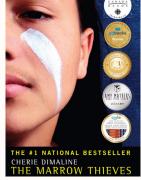
Oryx and Crake by Margaret Atwood (McClelland and Stewart, 2003)



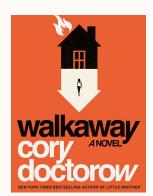
The Year of the Flood by Margaret Atwood (McClelland and Stewart, 2009)



On Thin Ice by Jamie Bastedo (Red Deer Press, 2006)

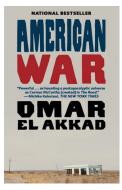


The Marrow Thieves by Cherie Dimaline (Cormorant Books, 2017)

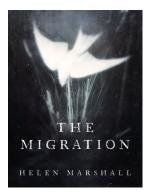


Walkaway by Cory Doctorow (Tor Books, 2017)





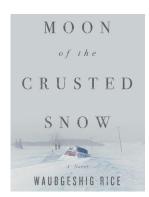
American War by Omar El Akkad (Alfred A. Knopf, 2017)



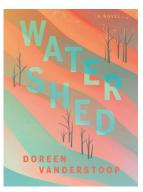
The Migration by Helen Marshall (Random House Canada, 2019)



Yesterday & Tomorrow by C.K. Kelly Martin (CreateSpace, 2016)



Moon of the Crusted Snow by Waubgeshig Rice (ECW Press, 2018)



Watershed by Doreen Vanderstoop (Freehand Books, 2020)

LEARNING EXPERIENCE

MINDS ON PROVOCATION

Some say that today's youth will inherit the earth and they will pay for the excess of the generation before them. Depending on the subject area you may provoke students with:

- · Canadian policy documents (The Next Generation of Emerging Global Challenges)
- TV news (Here's how climate change will impact the region where you live)
- Digital media (<u>Climate Change In Canada: 3 Crucial Stories To Watch Out For In 2021</u>)
- TED Talks (5 questions about climate change)
- · Documentaries (I Am Greta)
- YouTube (<u>David and Greta in Conversation: The Planetary Crisis | Wildscreen Festival 2020</u>)

After encouraging students to think about the impact of climate change, take time to help them focus on the topic. Many students will have misconceptions and bias from a variety of sources. A teacher-led classroom discussion is a great way to get ideas out into the open and to address the misconceptions. As a whole class or in small groups, student thoughts and ideas can be recorded in a variety of formats: Mind map (free tools), Wordle (free tools), Jamboard, etc.

In a class discussion, teachers can debrief students on misconceptions as they go along. In the case of small groups, teachers may wish to have each group share with the class to provide an opportunity to debrief students on possible science misconceptions such as:

- Misconceptions as Barriers to Understanding Science
- Science Misconceptions | Common Misconceptions in Science
- · An exploration of common student misconceptions in science

This could also be extended into media literacy and critical thinking.

READ, PLAN, AND PRACTICE

Students are to select a book appropriate for their reading level and interest.

While reading the book, students are to record the following information in table format or other thought-organizing tools (<u>free tools</u>):

- Identify the impacts of climate change as they are represented in the book.
- How was life on the planet influenced by those impacts?
- Identify possible causes of climate change either implicitly or explicitly implied in the novel.
- · Suggest real world changes to reduce/eliminate the cause of the impacts.
- How did the characters deal with the impacts during everyday events?
- Extension: Many of the suggested novels also have an Indigenous author/character/theme that can be further explored.

MAKE, TINKER, AND MODIFY

Provide an opportunity for students to be creative in the expression of their learning. The learning should reflect what knowledge they gained about climate change, the impact of climate change and steps to reduce/eliminate the impact of climate change.

Sample creative expressions of learning that go beyond the essay or poster:

- Artwork
- Poetry
- Video
- Podcast (interview or commentary) How-To
- Public service announcement (adapt from the podcast How-To)
- Letter to elected official.
- Letter to the local newspaper (letter to editor/op-ed)

It is important for students to produce a product that is more than just an assignment for a teacher. Create a website or other online sharing resources to showcase and publish student work (Google Sites, Wordpress, etc.). Here are some <u>Creative Tools for Making and Sharing</u>. Remember to review and follow school board policy on publishing student work and the use of third-party online resources that are not part of your school online learning environment.

REFLECT AND CONNECT

LEARNING SHOWCASE

Provide students with the time and opportunity to discuss and look at the products produced by other students.

THE BIG THINK

The culminating activity should be one where students reflect on their learning and their personal role in climate change.

Students should write a short exposition to illustrate their reflections with the following prompts:

- · What did you learn about climate change?
- · What can you do to reduce/eliminate the impact of climate change?
- · What will you share with others about what you learned about climate change?

ADDITIONAL CANADIAN BOOKS AND BOOK LISTS TO SUPPORT THIS SUB-THEME

Physical and/or digital copies of the novels. Audiobook versions should also be made available for students with special needs.

Climate Change Fiction (Cli-Fi) has generated a lot of interest over the past decade. Traditional media sources have generated a number of book lists that can be found below:

- What is Cli-Fi? A Beginner's Guide to Climate Fiction (Book Riot)
- 10 Cli-Fi Novels for the Dark Days Ahead (Book Marks)
- Discover the genre of cli-fi with these 6 books (CBC News)
- So You Want to Read Cli-Fi: Here's Where to Start (Penguin Random House)
- · How Climate-Change Fiction, or 'Cli-Fi,' Forces Us to Confront the Incipient Death of the Planet (The New Yorker)
- CliFi: The hottest reading trend (Sierra)
- 'Cli-Fi' May Be No Stranger than Reality (United Nations University)
- These Cli-Fi Classics Are Cautionary Tales For Today (NPR)
- Cli-Fi: Birth of a Genre (Dissent Magazine)
- Climate Fiction: Can Books Save the Planet? (The Atlantic)

ADAPTATIONS FOR THIS LESSON

This lesson can be adapted to online learning environments by creating a KBC (Knowledge Building Center). This is a sample of a KBC on <u>climate change</u>. Here is another example explained in this blog post <u>Inquiry Untethered</u> by Anita Brooks Kirkland.

MORE RESOURCES

Teachers can find a variety of resources online to help them develop their own understanding of climate change. Here are a few to get you started:

- Useful Links for Environmental Education (OTF)
- <u>Climate Change Resources For Teachers</u> (Learning for a Sustainable Future)
- Climate Change Resources for Students and Teachers (Common Sense Media)

Many school boards have databases that contain a significant number of publications and resources about climate change:

- Gale in Context: Global Issues
- Gale in Context: Environmental Studies
- · EBSCO's Explora
- Learn360
- Curio.ca from CBC