

# CLI-FI: REFRAMING YOUNG PEOPLE'S RESPONSES TO CLIMATE CHANGE

*Judith Wakeman considers how we can raise a generation to look forward to the future with hope when all they see around them are messages of gloom.*

Is climate change education appropriate for young adults in 2020? Even though climate change will probably reach a crisis point in their lifetimes, is this knowledge too great a burden for the young people in our care? Are we expecting them to find solutions for problems they have no ability to solve?

## THE AUSTRALIAN SUMMER OF 2019–20

Few Australians would have escaped the emotional impact of the fires that raged for over four months in every Australian state and crushed the capacity of our firefighters to protect us over the summer of 2019–20. The news stories of survivors, the persistent smoke haze and the reported deaths of billions of animals threatened to overwhelm our emotions.

Even before these fires, The Australia Institute's Climate of the Nation report, released in September 2019, noted, not only that that the incidence of concerns about climate-related issues were increasing in the adult population, but that 83% of those in 18–34 age group were concerned about climate change compared to just 67% in the 55+ age group.

Young people are predictably more concerned about climate change because they will be more likely to experience the effects in their lifetimes, because they are more informed about the science, because they have no political influence to address the drivers of climate change, and because they see that nothing is being done to protect their future, and indeed some political decisions are causing climate change to accelerate.

## TEENS ARE MORE VULNERABLE AFTER ENVIRONMENTAL DISASTERS

Young people are also more likely to be affected by natural disasters themselves. For example:

- their social networks are more likely to be disrupted earlier and for longer
- their emotional resilience and personal strengths are probably less well developed
- their go-to people at home, school or other activities may not be contactable or might be occupied elsewhere
- they are less able to identify their own feelings, articulate their needs and find the help they require
- their personal and individual needs will be considered less urgent than society or family needs
- they are more likely to be overwhelmed by grief, trauma, guilt, hopelessness and frustration
- they are less likely to talk to their peers about their emotional wellbeing.

How do we prepare today's children for a world defined by trauma without inflicting further trauma ourselves? Where do we draw the line between responsible education and undue alarmism? How do we nurture the core confidence of our young people and prepare them for an uncertain future without paralysing them with anxiety?

## ACTION IS THE ANTIDOTE TO DESPAIR

For many, concerns about the threat of climate change are manifesting as eco-anxiety, solastalgia, climate grief or pre-traumatic stress (fear of the future). These are considered to be valid, reasonable and justified emotional responses to the very real and existential threat posed by climate change.

Our evolutionary responses to these emotions are fight, flight or freeze.<sup>1</sup> However, since the flight or freeze responses do nothing to alleviate the threat of climate change, only fight is considered to be an appropriate, adaptive and therefore healthy response to anxiety caused by environmental uncertainty.

In many ways, young people are already at the forefront of environmental activism. Their anxiety in the face of an uncertain future is appropriate, and taking action is a proven way towards addressing their concerns. These young activists may not be the teens that parents and teachers should be most concerned about.

But if scientific knowledge is not transferring to power in tackling climate change, how do we, as educators, effectively inform our students about the science of climate change? Science is sometimes seen as complex, experimental and elitist – the lay person can feel shut out and inferior. Too much information, with unfamiliar terminology, new concepts, and charts that predict doom and gloom can fuel the flight or freeze responses.

Teachers, and parents, walk a tightrope between being honest and being comforting, and between empowering young people with hope and weighing them down with the responsibility of saving the planet.

## WHAT IS CLI-FI?

Cli-fi (climate fiction) is a genre usually set in the present or the very near future with the effects of climate change as a backdrop and a plot in which catastrophic events unfold amidst social and environmental upheaval. Young adult (YA) cli-fi novels feature teenage protagonists with absent or unhelpful adults. The authors of YA cli-fi present readers with unsettling climate changed worlds, and explore ways that families and relationships will be affected in these new societies, the nature of heroes and villains, and how we might coexist with an increasingly hostile environment.

In these worlds, where it is difficult to distinguish good from bad, readers are challenged to reflect on what is important to them, examine their values, and consider what they need to preserve and what they are prepared to sacrifice.

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<sup>1</sup> Futurist Richard Eckersley identified three responses to fear of the apocalypse: nihilism, fundamentalism or activism. He identified activism – where hope rules – as the only adaptive response to the threats posed by climate change.

In cli-fi we find heroes dealing with the impacts of climate change, adapting to the aftermath of natural disasters, and pressuring governments and corporations to act. Alternative scenarios are developed, challenges posed and questions answered: What does martial law look like? What would you do to protect your family, or a bottle of water?

In their didactic role, authors of YA cli-fi, through the voices of their characters, can explain scientific terms and concepts, explore individual and government responses, and address other unknowns, such as survival tactics and medical issues. In this way they provide their readers with knowledge and empowerment and a different perspective.

Authors engage the emotions and compel readers to become agents of change. Various and volatile combinations of fear, anxiety, confusion and anger exist in cli-fi, but always with a message of hope.

## SUPPORTIVE FICTION

In the classroom, cli-fi has the potential to raise awareness in a non-threatening and non-personal way, motivating debate and inspiring action, and so potentially alleviating anxiety. Cli-fi adheres to scientific accuracy, introducing concepts and language such as feedback loops, tipping points, permafrost, gyres and gulf-streams – terms that beget curiosity, enable discussion, and encourage research and investigation.

In cli-fi novels, readers connect with like-minded people; they feel less isolated, and recognise their eco-anxiety as justified and valid. Readers join with fictional characters to explore solutions, share problems and ideas, engage their creativity and imagination, and learn ways to adjust to the future that is presenting itself in the novel. At the same time they are building self-efficacy and emotional resilience, identifying and evaluating values and relationships. In the process they become less concerned with their own personal anxieties and begin to see the potential in action as an antidote for anxiety, and perhaps find something worth fighting for.

But cli-fi has another purpose, and that is to show us our possible futures. When we read dystopian and science fiction novels, we explore other worlds with scant regard to how those worlds evolved. Cli-fi fills in those gaps, forcing us to confront our grief and perhaps motivating us to fight harder to save those things we care about, to drive change, join rebellion and embrace activism. Cli-fi introduces us to messages of survival; the collapse of society and ecological systems, extreme weather, preppers, martial law and medical consequences can all be explored in cli-fi.

Most importantly, research shows that cli-fi also encourages those in the unhealthy mindsets of flight and freeze responses to move into a 'growth mindset' by cultivating hope and self-efficacy and inspiring them to focus their energies outwards.

As hope inspires climate change action, and in turn as climate action generated by one's peers can generate hope, young people can see their anxiety transformed into action and see themselves as part of the largest united social mass of individuals in history: those who want to see a brighter future.

Supportive fiction, by definition, nurtures hope, resilience, self-efficacy and optimism. But along the way it encourages us to explore, experience and imagine community, collaboration, empathy, laughter, relationships, values, pathways, perspectives, validation, insight, catharsis, knowledge, skills, universality, self-knowledge, self-acceptance, growth, healing, resolution, trust, alternative endings, escapism, immersion, vicarious learning and reframing. Good cli-fi can offer all of these.

And so, in the style of GK Chesterton we might say: Cli-fi does not exist to tell children that climate change is real. Children already know climate change is real. Cli-fi exists to tell children that climate change is not the end of the world.

## FURTHER READING AND REFERENCES

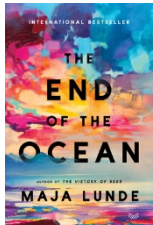
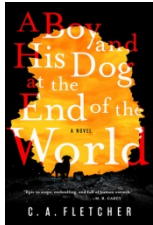
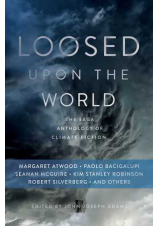
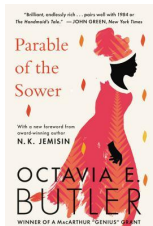
<https://read4life.today/2020/02/11/cli-fi-reframing-eco-anxiety-in-2020/>


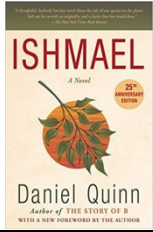

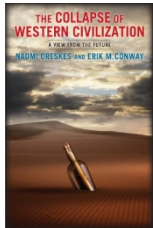
<https://read4life.today/further-reading/#Cli-Fi-Reframing-Eco-Anxiety>

## A SELECTION OF RECOMMENDED CLI-FI NOVELS

Ask your school librarian for more recommendations.

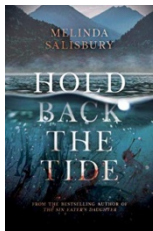

### Senior secondary and Adult

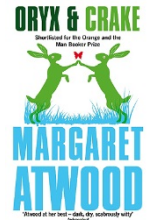
	<p>Maja Lunde – <i>The end of the ocean</i></p> <p>This follows <i>The history of bees</i> as the second of a series of four books loosely connected around the theme of environmental disruption and climate change.</p>
	<p>CA Fletcher – <i>A boy and his dog at the end of the world</i></p> <p>Published in 2019 and suitable for senior students, this is a captivating tale with a haunting message.</p>
	<p>John Joseph Adams (Ed.) – <i>Loosed upon the world: the saga anthology of climate fiction</i></p> <p>This collection of short stories, published in 2015, is notable for the contributions of authors considered pioneers of this genre.</p>
	<p>Kim Stanley Robinson – <i>The Ministry for the Future</i></p> <p>An investigation of creative actions that could be taken to combat climate change interspersed with voices of political and financial stakeholders are tied together by ongoing reports and impetus of the Ministry for the Future</p>
	<p>Octavia Butler – <i>Parable of the sower</i></p> <p>Originally published in 1994 and set in 2025, this book examines a culture that has been destroyed by drugs, disease, war, and chronic water shortages. The sequel is <i>Parable of the talents</i>.</p>

	<p>Steven Amsterdam – <i>Things we didn't see coming</i></p> <p>The narrator's life unfolds over three decades before a backdrop of a planet and a society constantly evolving in the face of climate change.</p>
	<p>Daniel Quinn - <i>Ishmael</i></p> <p>The actions and attitudes of the human race are interpreted through the eyes of a non-human being in thought provoking dialog.</p>
	<p>James Lawrence Powell - <i>The 2084 Report: An Oral History of the Great Warming</i></p> <p>This fictional report from the future presents the likely scenarios for the next few based on scientific projections.</p>
	<p>Naomi Oreskes &amp; Erik M Conway – <i>The collapse of Western civilization: a view from the future</i></p> <p>This 2014 publication is frighteningly real as Australia recovers from a devastating summer of fire.</p>

Find more at: <https://www.goodreads.com/review/list/105711092-read4life?shelf=cli-fi>

### Middle secondary

	<p>Melinda Salisbury – <i>Hold back the tide</i></p> <p>Of this book, the author says “I wanted to write something a little more reflective of the state of things right now, for the youths and teenagers who are campaigning for change.”</p>
	<p>Neal Shusterman – <i>Dry</i></p> <p>This author presents his readers with a realistic scenario and then asks and answers questions on our behalf. Relationships, health and political issues are covered in this novel.</p>

	<p>Lili Wilkinson – <i>After the lights go out</i></p> <p>Although not strictly cli-fi, this novel examines how relationships change in a small community which becomes isolated when power and communications suddenly and inexplicably fail.</p>
	<p>Margaret Atwood – <i>Oryx and Crake</i></p> <p>This is the first book of the MaddAddam trilogy and it set in a world devastated by a pandemic as well as a climate changed world.</p>
	<p>Matthew Reilly – <i>The Secret Runners</i></p> <p>Part cli-fi, part dystopian and part fantasy in this stand-alone novel. Good discussion starter for younger teens.</p>
	<p>Paolo Bacigalupi - <i>The Water Knife</i></p> <p>This is one of a number of books with a climate changed world as a backdrop written by this author.</p>
	<p>Marcus Sedgwick – <i>Floodland</i></p> <p>Published in 2001, and set in a world of global warming and sea level rise, this book challenges readers to consider what is important in an uncertain and unpredictable world.</p>

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