ORIGINAL RESEARCH PAPER

English Literature

WARNING AND ENGAGEMENT: TEACHING THE CLIMATE FICTION OF J. G. BALLARD AND BARBARA KINGSOLVER IN INDIAN HIGHER EDUCATION

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ABSTRACT

Environmental Studies is compulsory for undergraduates in India, but it is mostly taught as factual science. This study argues that climate fiction can add the imaginative and ethical engagement such courses lack, provided it is taught with care. It examines four novels, J. G. Ballard's The Drowned World (1962) and The Burning World (1964) and Barbara Kingsolver's Prodigal Summer (2000) and Flight Behavior (2012), and identifies two teaching modes. Ballard's dystopias teach through warning, making long-term consequences and social causes imaginable. Kingsolver's realist novels teach through engagement, showing how knowledge, livelihood and belief interact. Recent evidence shapes the proposal: an experiment found that both dystopian and realist climate stories shifted readers' attitudes but that the effect faded within a month, and a ten-country survey including India found high levels of climate distress among young people. The study therefore proposes a sustained four-unit module that pairs each novel with an Indian context and balances warning with agency.

1. INTRODUCTION

India is highly exposed to heat, flood and drought, and has given environmental education a formal place in its universities. After directions from the Supreme Court in *M. C. Mehta v. Union of India*, the University Grants Commission made Environmental Studies compulsory for undergraduates (Bharucha, 2005), and the National Education Policy 2020 lists environmental awareness among the aims of a holistic education (Ministry of Human Resource Development, 2020). In most colleges, however, the subject is taught as facts and tested by objective questions. Amitav Ghosh argues that the climate crisis is also "a crisis of culture, and thus of the imagination" (Ghosh, 2016, p. 9). If so, literature departments have a part to play. This study asks what two very different climate novelists offer Indian classrooms and how a module built on them should be designed in the light of recent evidence.

2. Review of Literature

Orr (1994) argued that "all education is environmental education" (p. 12), and Kahn (2010) developed an ecopedagogy that asks students to question the social causes of environmental harm. Both draw on Freire's (1970) idea that learning should proceed through dialogue rather than the one-way deposit of facts. Within the humanities, Siperstein, Hall and LeMenager (2017) have gathered practical approaches to teaching climate change through literature, film and writing. Bartosch (2018) shows how novels such as *Flight Behavior* can teach students to think across local and planetary scales. Evidence on readers is more cautious. Schneider-Mayerson (2018) found that readers of climate fiction reported a stronger sense of the reality of climate change. An experiment by Schneider-Mayerson et al. (2023) found that both a dystopian story and a realist story had small positive effects on readers' beliefs and attitudes, but these faded to non-significance after one month. Hickman et al. (2021) surveyed 10,000 young people in ten countries, including India, and found that 59 per cent were very or extremely worried about climate change, with respondents in Global South countries reporting greater worry and greater effects on daily life. Two gaps follow. Few studies place climate fiction within Indian curricula, and few design teaching around the evidence that effects are short-lived and that students may already be anxious.

3. METHOD

The study combines close reading of the four novels with curriculum design. The novels are read for the teaching function each performs. Because hope matters for engagement, the design also draws on Ojala (2012), who found that constructive hope, which acknowledges the problem while trusting in the possibility of action, is linked to young people's environmental engagement. A module is then proposed that responds to the evidence above: it is sustained rather than one-off, pairs every text with a local context, and moves from warning towards agency.

4. Ballard: The Pedagogy of Warning

In *The Drowned World*, rising heat has melted the ice caps and London is a tropical lagoon. In *The Burning World*, a polymer film formed from industrial waste covers the oceans, rain stops, and society reorganises around the control of water. Both novels push present tendencies to extremes. Their classroom value lies in making the long term visible: a student who knows that sea levels are rising may never have pictured a familiar city under water. *The Burning World* is especially useful because it blames industry rather than nature, and its guarded water supplies open discussion of environmental justice. The limit is equally clear. Ballard's characters rarely act, so his novels taught alone risk deepening the fatalism that Hickman et al. (2021) record.

5. Kingsolver: The Pedagogy of Engagement

Prodigal Summer follows a biologist protecting coyotes, a widowed entomologist learning to farm and two elderly neighbours quarrelling over pesticides. *Flight Behavior* follows a young farm wife who finds millions of displaced monarch butterflies on her family's land and becomes a scientist's assistant. These novels place ecological ideas such as food webs, pollination and migration inside lives that depend on them, and they show why people resist knowledge: debt, faith, distrust of outsiders and poverty. Their characters also act by changing how they farm, protecting a species or returning to education. Kingsolver supplies the agency that Ballard withholds. Bartosch (2018) adds that *Flight Behavior* asks readers to hold a single valley and the whole planet in mind at once, which is precisely the habit of thought environmental education tries to build.

6. Proposed Module

Table 1 sets out a four-unit module for undergraduate or postgraduate English programmes. It begins with warning and ends with engagement, and runs across a semester so that discussion is repeated rather than single.

Table 1: Proposed Four-unit Module

Unit	Text	Indian context	Activity
I	Ballard, The Drowned World	Urban flooding in coastal cities such as Mumbai and Chennai	Picture a local city under sea-level rise; discuss how disaster changes perception
II	Ballard, The Burning World	Urban water scarcity and unequal access in drought	Debate who controls water in a crisis and why

III	Kingsolver, Prodigal Summer	Farmers' ecological knowledge; the Chipko movement	Interview a farmer or elder about local ecological knowledge
IV	Kingsolver, Flight Behavior	Heat and untimely rain on rural households	Turn one climate fact into a short story set in the student's own district

Source: Prepared by the author.

Teachers should replace these contexts with ones their students know. A college in Haryana, for example, might use groundwater decline, crop-residue burning or heat stress among farm workers. Assessment can combine reflective journals, short creative pieces and field interviews with a conventional essay. Joint sessions with geography or environmental science teachers would strengthen the science.

The module also needs Indian voices beside the two Western authors. Amitav Ghosh's *The Hungry Tide* (2004) sets scientists, fishermen and refugees against one another in the Sundarbans and raises the same question of whose knowledge counts that Kingsolver raises in Appalachia. His *Gun Island* (2019) links climate change to migration across continents. Teachers in Hindi-medium or bilingual colleges can add regional writing on drought, flood and farming, which allows students to read in more than one language and to see that climate writing is not only a Western form. Such pairings also correct a weakness of the dystopian mode, which often imagines disaster from the point of view of wealthy societies. Reading Ballard's fenced coast alongside Ghosh's flooded islands lets students ask who is protected and who is left outside in each case.

Each unit can run for about three weeks. The first week sets the context, ideally with a colleague from geography or environmental science explaining the relevant process, such as sea-level rise or groundwater decline. The second week is given to guided reading and dialogue in small groups, using a few open questions: what has gone wrong, who is responsible, who suffers most, and what could be done. The third week moves outward through the local activity and a short written reflection. This rhythm keeps the science, the story and the student's own place in view together. For assessment, a reflective journal (30 per cent), a creative piece (20 per cent), a field report (20 per cent) and a critical essay (30 per cent) give weight to both feeling and analysis.

By the end of the module students should be able to explain the main features of climate fiction, distinguish its speculative and realist modes and their effects, identify social and economic causes of environmental harm in a text, relate those causes to their own region, and communicate an environmental issue to a non-specialist audience. These outcomes join literary skill to ecological literacy, which is the purpose of placing the module in an English programme rather than adding another science lecture.

7. DISCUSSION AND LIMITATIONS

The proposal answers both gaps. Because effects of single readings fade (Schneider-Mayerson et al., 2023), the module repeats and extends discussion over a semester. Because students may already be anxious (Hickman et al., 2021), it moves from Ballard's warning to Kingsolver's agency, so that alarm is followed by examples of people who act. This is the kind of constructive hope Ojala (2012) associates with engagement, and it avoids the false comfort of pretending the problem is small. Some limits remain. The novels are long, so selected chapters may be needed. Both authors are Western, which is why local contexts and Indian texts such as Ghosh's *The Hungry Tide* (2004) should accompany them. The module has not yet been tested in a classroom, and a pilot with pre- and post-course measures is the obvious next step.

8. CONCLUSION

Ballard and Kingsolver offer complementary teaching modes, warning and engagement. Taught together, over time and against Indian realities, they can add imagination and ethical reflection to the factual environmental education already required in Indian universities. English departments teach large numbers of students across the country, which makes them well placed to try this approach and to report what they find.

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