

# ELA Superheroes: Snapshots of Environmental Literacy in California Classrooms



CALIFORNIA  
ENVIRONMENTAL  
LITERACY  
INITIATIVE

## Grade 11 Snapshot: *Climate Speculative Fiction Writing* - Language and Effective Expression Development Through an Interdisciplinary High School Climate Solutions Unit

August Freas' high school place-based, interdisciplinary climate and environmental justice speculative fiction writing unit invites students to harness the power of their imaginative lenses to address environmental racism and the climate crisis. The task is to write a story with a setting and problem grounded in a local environmental or climate justice issue, and then students solve the problem in an imaginative way through narrative writing. The guiding inquiry question is: How can I contribute to a vision of an overall environmentally just world? Other questions that the unit addresses include: What is climate justice and why is it important? What are the impacts of environmental racism and how can it be addressed? What does civic engagement entail and why is this knowledge important with regard to public service, making change, and addressing climate justice issues at home? ([CA ELD Standards Circles of Implementation](#)).

Students begin by choosing an environmental racism case study in their history class. Then, in their English class, they create a narrative for characters to imagine a future where this problem no longer exists. Case studies include relevant environmental issues in their community, such as air pollution in West Oakland and nuclear soil contamination in Bayview ([UDL Checkpoint 7.2](#)). Students spend the first two weeks framing the problem and building their background knowledge in both their history and English classes ([UDL Checkpoint 3.1](#)). In their English class, August pre-teaches vocabulary and students interact with a variety of informative texts on the impacts of climate change and environmental racism in their community ([UDL Checkpoint 2.1](#)). Students create a tri-fold poster board that includes the problem, the solution, and a public service action or announcement. In their history classes, students write a letter to a government official or another community representative proposing a solution to the environmental issue that includes data and case-study evidence to support claims ([UDL Checkpoint 7.2](#)). Finally, in their English classes, students write a speculative fiction narrative that allows them to creatively imagine a solution that has not yet been offered ([UDL Checkpoint 8.2](#)).

August reflects that the unit unites pragmatism and creativity and genuinely motivates students to write. One student developed a story that involved a time-traveling evil executive who bounces into the future, sees the destruction caused by their actions, travels back to the distant past and marvels at the beauty of the earth, and then arrives again in the present to right their wrongs. One of August's bilingual students who struggles to produce language was highly motivated by this project ([UDL Checkpoint 7.1](#)). She was not

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only able to produce thoughtful, coherent writing full of creative characters, but she was able to meet the explicit standards-based expectations that August required. August believes that this student’s success with the project was a direct result of the freedom to use her own voice creatively, as well as her emotional attachment to the characters she created.

Framework Highlights	Lesson Details
<p><b>UDL Checkpoint 3.1: Activate or supply background knowledge</b></p>	<p>Instruction is anchored by linking to and activating relevant prior knowledge about local and relevant urban environmental issues through a differentiated text set before students begin creating their tri-folds and narrative speculative fiction pieces. Cross-curricular connections are explicit; this unit is a collaboration with the social science department, and literacy strategies are taught in the history classroom and environmental principles are incorporated in the speculative fiction unit.</p>
<p><b>EP&amp;C 2D: People Influence Natural Systems</b> The legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.</p>	<p>This unit directly addresses the underlying systemic issues that have contributed to environmental racism and climate change impacts in their urban community through the use of local, place-based case studies. Students address their arguments for solutions to those who hold power over the management of natural systems.</p>

- CA CSS for ELA/Literacy:**
- **CCSS.ELA-LITERACY.W.9-10.3.A.** Engage and orient the reader by setting out a problem, situation, or observation, establishing one or multiple point(s) of view, and introducing a narrator and/or characters; create a smooth progression of experiences or events.
  - **CCSS.ELA-LITERACY.W.9-10.3.B.** Use narrative techniques, such as dialogue, pacing, description, reflection, and multiple plot lines, to develop experiences, events, and/or characters.
- Related CA Next Generation Science Standards:**
- **HS-ESS3-4.** Evaluate or refine a technological solution that reduces impacts of human activities on natural systems.

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## Related CA History-Social Studies Standards:

- **11.2.2.** Describe the changing landscape, including the growth of cities linked by industry and trade, and the development of cities divided according to race, ethnicity, and class
- **11.11.4** Trace the impact of, need for, and controversies associated with environmental conservation, expansion of the national park system, and the development of environmental protection laws, with particular attention to the interaction between environmental protection advocates and property rights advocates.

## Environmental Principles & Concepts

- **Principle 2C.** The expansion and operation of human communities influences the geographic extent, composition, biological diversity, and viability of natural systems.
- **Principle 2D.** The legal, economic, and political systems that govern the use and management of natural systems directly influence the geographic extent, composition, biological diversity, and viability of natural systems.

## Sources

[Imagine 2200 Climate Fiction for Future Ancestors Collection](#) (Grist, 2024)