

Feeling
Hot Hot Hot
The Climate Change Show

Teachers Notes

Introduction

This performance introduces Climate Change issues to young students in an entertaining in-school theatre show. As a topic likely to remain in the news for the foreseeable future, but one involving complex science and considerable debate, “Hot Hot Hot” attempts to cover all the relevant issues using the best science available, in a simplified and engaging manner.

The aim of the performance is to prepare students to engage in further discussion in an informed way, as well as enabling them to participate in simple activities that help manage the Climate Change challenge.

Weather vs Climate

The first section of the show explains the difference between climate and weather, by demonstrating how weather alters according to location, season, and other factors. Over time, the regular *pattern* of weather is what we call climate.

Characters who live in opposite extremes (tropics and Snowy Mountains) meet and discover how they perceive temperature and precipitation in different ways and how the changing climate is affecting them in different ways.

DEMONSTRATION: *Students participate in a demonstration in which they act as various weather factors (sunshine, rain, clouds, snow, etc), in the context of the differing seasonal variations experienced by the characters. Students discover that whilst the character from The Snowy Mountains experiences the four traditional seasons, the tropical character describes three seasons only (Build-up, Wet, & Dry).*

Why Is It Getting Hotter?

The main thrust of the second part of the performance is to give students an understanding of the primary cause of Climate Change; the build-up of Greenhouse Gases in the air, which trap heat within Earth's atmosphere that would otherwise escape into space.

Whilst it is not claimed that humans are the only cause of Greenhouse Gas increases, people will need to address the changing climate regardless of who or what is responsible. Therefore, the show predominantly examines human causes that we *can* change.

An astronaut travels back in time to find when humans first began burning fossil fuels in a bid to educate people as to how they can provide for their energy needs through alternative means.

EXPERIMENT: *Using a clear plastic container to represent the "Greenhouse" of gases that prevent heat from escaping from the atmosphere. Students can replicate the results by watching how quickly two scoops of ice-cream (or ice-cubes) melt outside in the sun, one with a 'greenhouse' cover and one uncovered.*

If We Do Nothing

The show takes a generally positive tone in the hope that students become proactive, rather than disheartened, about Climate Change. In this section, however, the performance takes a short time to illustrate the problems society could face if nothing is done.

DEMONSTRATION: *The characters appear on a green mat representing a land mass. Each character describes an ever worsening list of problems; price rises for fuel and food, loss of arable soil, climate change refugees, loss of habitats such as reefs, rising sea levels, heat related illnesses and deaths. As they make each statement, their 'island' decreases in size until they cling together on a tiny portion of mat.*

If We Do Something

The next section takes place in a world that has taken action to address Climate Change, with characters describing the way they now live; eating locally grown food to save on transport emissions, using energy efficient light-bulbs, taking simple measures around the home to improve insulation, planting trees, eating less red meat to reduce cattle emissions, etc.

EXPERIMENT: *Energy conversion is demonstrated, showing how any heat, wind, or other movement, can be turned into electricity, so it is not necessary to burn fossil fuels for energy generation.*

The Climate Change Challenge

An interactive quiz recaps on the major points of the show, so that students leave having articulated their memory of the key issues.

Handy References

Intergovernmental Panel on Climate Change www.ipcc.ch/
United Nations www.un.org/climatechange/index/shtml

We hope you enjoy

feelin'

Hot Hot Hot

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