

Lesson Plan: Climate Denial: How language is used to misinform

This is a lesson plan developed by the Monash Climate Change Communication Research Hub ([MCCCRH](#)) with contributions by Lucy Bandiera, Tess Kelly, Will McIlroy, Josh Mancusi-Thomas and Dr. John Cook.

The lesson plan originated at the “Climate Classrooms: Educational Resources for Teachers” workshop at the Australian Meteorological and Oceanographic Society ([AMOS](#)) conference held online in February 2021. The workshop was sponsored by CLEX and supported by MCCCRH, AMOS, the [University of Melbourne](#), the [UNSW Sydney](#), and the [TROP ICSU](#) (Trans-disciplinary Research Oriented Pedagogy for Improving Climate Studies and Understanding) project. A version of the lesson plan tailored for use in Australian classrooms is available at this [link](#).

As a **high school Humanities** teacher in **English** or **Communications**, you can use this set of computer-based tools to help you teach students persuasive language techniques. It focuses on language techniques used in climate communication, specifically how climate misinformation has been used by a range of actors to confuse the public in order to stymie effective action on climate change.

This lesson plan uses a game titled ‘Cranky Uncle’ developed by John Cook, Monash University to help students develop critical thinking skills and equip them with skills in language analyses and techniques.

Students will be introduced to the five techniques within the FLICC Framework (Fake Experts, Logical Fallacies, Impossible Expectations, Conspiracy Theories, Cherry Picking), Climate myth examples and Climate denialism

Thus, the use of this lesson plan allows you to integrate the teaching of a climate science topic with a core topic in the Humanities.

Curriculum Code (Australia):

ACELA1567 – Understand how paragraphs and images can be arranged for different purposes, audiences, perspectives and stylistic effects

ACELA1569 – Analyse and evaluate the effectiveness of a wide range of sentence and clause structures as authors design and craft texts

ACELA1571 – Refine vocabulary choices to discriminate between shades of meaning, with deliberate attention to the effect on audiences

Use this lesson plan to help your students find answers to:

1. What is Climate Denialism?
2. Discuss how climate misinformation has been used by a range of actors to confuse the public in order to stymie effective action on climate change.
3. What are the five persuasive language techniques and how can they improve climate communication?

About the Lesson Plan

Grade Level	High School
Discipline	Humanities; English; Communications

Topic(s) in Discipline	Language techniques, Critical thinking, Communication, Climate Communication, Misinformation, Fake News, Climate Denial
Climate Topic	Climate Literacy
Location	Global, Australia
Access	Online; Offline
Language(s)	English
Approximate Time Required	55-70 min

Contents

1	Reading (5 - 10 min)	A reading on the 5 techniques of science denial This can be accessed here .
2	Reading (5 - 10 min)	A powerpoint presentation that describes each of the denialist strategies that make up the FLICC Framework This can be accessed here .
3	Videos (1 - 2 mins)	A series of very short videos, each focusing on logical fallacy or a language miscommunication technique. This can be accessed below: Example of 'Ad hominem' Fallacy (12 sec) Example of 'False analogy' Fallacy (6 sec) Example of 'False choice' Fallacy (21 sec) Example of 'Oversimplification' Fallacy (14 sec) Example of 'Single cause' Fallacy (18 sec)
4	Game (10 - 15 mins)	The Cranky Uncle Game that serves as the primary resource for the lesson plan and guides students through the FLICC Framework and examples of each denialist strategy This can be accessed here .

Step-by-step User Guide

(Here is a step-by-step guide to using this lesson plan in the classroom/laboratory. We have suggested these steps as a possible plan of action. You may customize the lesson plan according to your preferences and requirements.)

1	Topic introduction and discussion	Start the lecture through a discussion on the prevalence of fake news today and how science denialism can be counterproductive to pressing issues such as the climate crisis. Next, introduce the topic of science denialism through a classroom discussion using the reading titled ' A history of FLICC: the 5 techniques of science
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		<p>denial' by John Cook, Monash University available at the Cranky Uncle teaching resource webpage. This reading includes discussions on the 5 techniques of science denial namely:</p> <ul style="list-style-type: none"> ● Fake Experts, ● Logical Fallacies, ● Impossible Expectations, ● Conspiracy Theories, and ● Cherry Picking <p>Explain to your students how these denialist strategies make up the FLICC Framework. This resource also includes video lectures to further explain the topic. Definitions of each denial technique with climate change specific examples are also listed.</p> <p>This can be accessed here.</p> <p>A powerpoint presentation on these discussions that teachers can use in their classroom is provided by the author and can be accessed here.</p>
2	Extend Understanding	<p>Extend student understanding by playing a series of very short videos. Each video focuses on logical fallacy or a language miscommunication technique.</p> <p>This can be accessed below:</p> <ul style="list-style-type: none"> - Example of 'Ad hominem' Fallacy - Example of 'False analogy' Fallacy - Example of 'False choice' Fallacy - Example of 'Oversimplification' Fallacy - Example of 'Single cause' Fallacy
3	Explore Topic Further	<p>Use the Cranky Uncle game so that students understand the FLICC Framework and examples of each denialist strategy.</p> <p>Students can access the game via iPhone (http://sks.to/crankyiphone), Android (http://sks.to/crankyandroid), or browser (https://app.crankyuncle.info). The teacher can register for a group code via http://sks.to/crankyclass (not necessary but allows students to play the game anonymously without entering an email).</p> <p>“In the Cranky Uncle game, players are mentored by a cartoon personification of climate science denial. Cranky Uncle explains 14 techniques of science denial, from fake experts to cherry picking and a variety of different logical fallacies.”</p> <p>You can divide your classroom into groups and have students work in groups to match the definitions of the FLICC persuasive techniques, their titles and their symbols in the game.</p>
4	Discuss further	<p>After the students have finished exploring the game, have a classroom discussion reflecting upon concepts learned and connections to climate denial. You may also choose to ask your students to come up with new examples of climate misinformation and evaluate their understanding of science denialism using FLICC techniques.</p>

Learning Outcomes:

The tools in this lesson plan will enable students to:

- understand Science Denialism, specifically, Climate Denialism.
- learn how climate misinformation has been used by a range of actors to confuse the public in order to stymie effective action on climate change.
- identify and define the five techniques within the FLICC (Fake Experts, Logical Fallacies, Impossible Expectations, Conspiracy Theories, Cherry Picking) framework.

Additional Resources:**Credits/Copyrights**

1	Reading, " A history of FLICC: the 5 techniques of science denial "	Available on Cranky Uncle Website
2	Presentation, " Powerpoint of FLICC denial techniques "	Available on Cranky Uncle Website
3	A list of videos on different types of Fallacy	By John Cook Youtube Channel
4	Game, "Cranky Uncle"	Available on Cranky Uncle Website along with a Teacher's Guide To Crank Uncle .