

Climate Warming Debate Kit Evaluation Report

January 2022

Distributed from March 2021 Evaluated December 2021 – January 2022

- We estimate that at least 221 Debate Kits have been used with students.
- 75% of teachers who told us they haven't yet used the Kit report that they intend to use it in the future.
- **Feedback from teachers who have used the Kit is highly positive.** Teachers value the ways in which the Kit links to the curriculum, provides varied perspectives around the issue, and encourages students' lateral thinking.
- Every teacher responding to the feedback survey, reported that they intend to use the Debate Kit again.

Contents

Background	2
Distribution	3
Usage	4
Aims and achievements	8
Contact	11

Background

The Climate Warming (Ban Flying) Debate Kit was funded by the Royal Institution, IBM, Lloyd's Register Foundation, and UK Research and Innovation. It was produced alongside the CHRISTMAS LECTURES Zone, in partnership with the 2020 RI CHRISTMAS LECTURES series: Planet Earth: A User's Guide.



This question sets the ground for discussion of the surrounding environmental, social, and economic issues. The kit provides teachers with a resource to get their students discussing the associated personal, social and economic issues and to help them appreciate the power and limitations of science. The structure shows students how to build a discussion and back up their opinions with facts.









The facts in the Kit were researched and teachers were provided with a list of references and additional resources relating to the Kit: **flying.imascientist.org.uk**

Teacher feedback data in this report looks at survey responses collected between December 2021 and January 2022.

¹ planetearth.imascientist.org.uk

Impact of COVID-19

The COVID-19 pandemic has had significant and ongoing impacts on schools and teaching. Teacher feedback across our projects indicates a need to focus on the core curriculum due to lost time from school closures, students isolating, and navigating changing restrictions.

This has naturally impacted the demand for Debate Kits, as well as our ability to evaluate the usage of Kits that were distributed.

Feedback we have received indicates that many teachers have not yet had time to make use of the Kit, but that many intend to in the future. Feedback from teachers who have used the Kit moreover, is consistently positive. Teachers value the ways in which the Kit links to the curriculum, provides varied perspectives around the issue, and encourages students' lateral thinking. Every respondent said they intend to use the Debate Kit again.

We continue to promote and distribute the Kit.

Distribution

2,000 Debate Kits were printed in, and distributed from March 2021. At time of writing, 800 Debate Kits have been distributed:

- 582 Kits have been distributed to teachers following direct requests.
- 200 Kits were sent to funders.
- 18 Kits distributed to other collaborators and third parties.

Promotion is ongoing, and the request form remains open on the Debate Kit website.

Additionally, digital versions of the Debate Kit are available to download free-of charge from the Debate Kit website.²

At time of writing, the Debate Kit has been downloaded from the site 408 times.³

² debate.imascientist.org.uk/the-kits/#climate%20change

³ Combined downloads of the standard version and the large version of the Debate Kit PDFs to 31 January 2022.

Usage

In December 2021, teachers who had received the Debate Kit during the 2020/21 academic year were emailed and asked whether they had used the Kit with their students. Non-respondents were followed up. After reporting that they had used the Kit, respondents were asked to complete a short feedback survey. Teachers who reported not having used the Kit were asked to provide the main reason for this.

How many Kits were used?

Randomised sampling group

Total estimated usage of the Debate Kit was established using a random sample of 100 teachers who were sent the Kit during the 2020/21 academic year. This sample was checked against teachers who had already told us they had used the Debate Kit and the remaining teachers were sent individual, simple emails asking for a simple "Yes" or "No" reply as to whether they had used the Kit.

At time of writing, 28 of the randomised sample of 100 teachers have responded to let us know whether they have used the Debate Kit: 9 (32%) said they had used it.

By extrapolating this figure to the 582 teachers to whom the Debate Kits were directly distributed, we estimate that 186 of these Kits have been used.

If we estimate that 16% of the 218 Kits sent out through other routes were used — half of the usage of the directly distributed Kits — we find a figure of 35 of these Kits being used.

Through this broad approximation then, we have an estimate of at least 221 Debate Kits having been used with students.

Reasons for not using Kits

Teachers who reported that they had not yet used the Kit with their students, were asked the main reason for this.

Lack of time to use the Kit was the most common response, with 60% (27/45) teachers reporting that they had not had time to use it.

Among teachers reporting other reasons for not having used the Kit (16%, 7/45), the impact of the COVID-19 pandemic was a common reason given for not having been able to use the Debate Kit:

"Essentially not having the time due to [COVID-19] and the need to address content gaps."

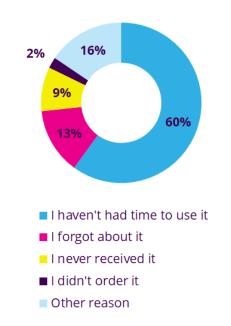
Teacher, Feedback survey

"[COVID-19] caused too much lesson disruption."

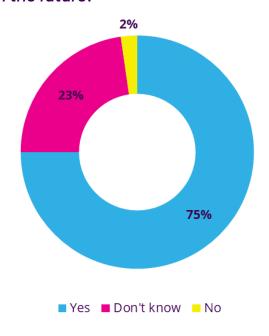
Teacher, Feedback survey

Additionally, teachers were asked if they intend to use the Debate Kit in the future. 75% (33/44) reported that they do.

What is the main reason you have not yet used the Debate Kit?



Do you intend to use the Debate Kit in the future?



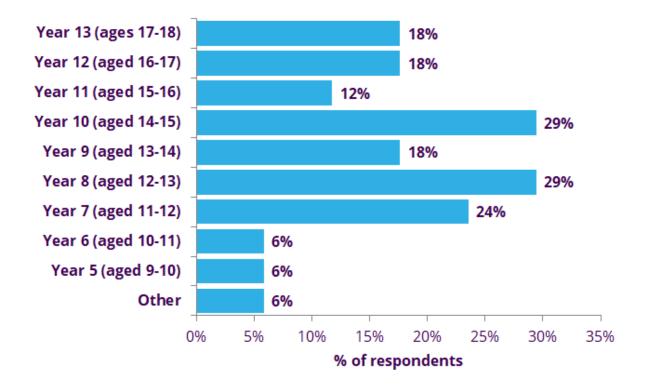
How Kits were used

Teachers who reported that they had used the Kit were asked to complete a short feedback survey including questions on how the Kit had been used, as well as their thoughts and impressions of the Kit.⁴

Usage of the Debate Kit

Teachers were asked with which age groups they had used the Debate Kit. Most commonly, the Kit had been used with students in Years 7, 8, and 10; students from 11 to 15 years old.

Which age group(s) have you used the Climate Warming Debate Kit with?



How many classes or groups have you used the Climate Warming Debate Kit with?

How many colleagues have you lent the Climate Warming Debate Kit to?

⁴ See also: *Aims and achievements*



Usage of additional resources and tools

A website was created to accompany the Debate Kit and provide teachers with references and additional resources for running the lesson: flying.imascientist.org.uk

At time of writing this site has been viewed 471 times.⁵

As part of the feedback survey, teachers were asked how they had used this resource. 53% (9/12) of respondents reported that they had used the resource site to display character paragraphs, facts, issues, and questions; 18% (3/12) reported having used the further reading resources.

Future use

When asked about using the Debate Kit in the future, every respondent (17/17) reported that they intend to use it again.

⁵ Page views to 31 January 2022.

Aims and achievements

After telling us they had used their Debate Kit, teachers were asked to fill in a feedback survey.⁶

Value of the Debate Kit

Teachers were asked what they felt was the value of the Climate Warming Debate Kit in terms of curriculum outcomes or other benefits to students.

Teachers valued the curriculum links included in the debate, as well as the broad range of viewpoints:

"Links well to the curriculum, and allows students to develop soft skills such as communication."

Adam, Teacher, Feedback survey

"Broad range of uses. Very varied perspectives to debate with. Used in a psychology example of bias through selection also. Meets many curriculum points when thought about creatively"

Jennifer, Teacher, Feedback survey

"I have used the kit to develop core employment skills and understanding of ethics for the new T-level Science." Alison Ackroyd, Teacher, Feedback survey

"Other benefits are students articulating science and opinions verbally.
Outcomes on Science were more Working Scientifically and the connection between different people and occupations and science related issues"

David Hammond, Teacher, Feedback survey

"Gives a range of perspectives in an accessible, relevant way." Sarah Jeffreys, Teacher, Feedback survey

Additionally, teachers praised the ability of the Kit to make links between a range of topics, and to encourage oracy, engagement, and lateral thinking:

"Helps [pupils] make links between transport, burning fuels, global warming, climate change. Encourages oracy, debate, engagement and ideas on social responsibility."

Meryl Batchelder, Teacher, Feedback survey

⁶ See also: *Usage; How Kits were used*

"It appears to have been used well to generate a good debate and promote some lateral thinking with the pupils"

Teacher, Feedback survey

"I have used it to make a display in a classroom to get pupils talking about the issues"

Teacher, Feedback survey

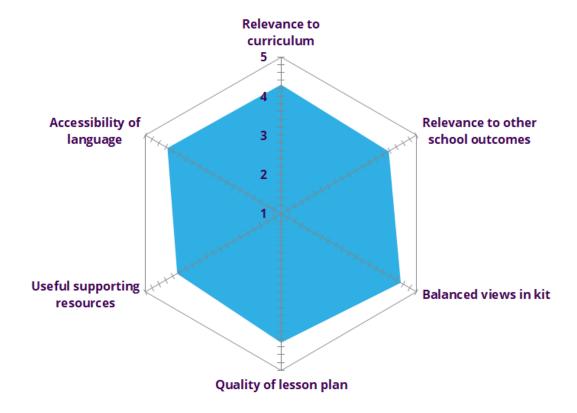
"Debates are such a powerful teaching tool. I love them. Hopefully you will have more. Great to engage those who sometimes step back and super relevant."

Teacher, Feedback survey

Ratings

Teachers were asked to give a rating (from 1 to 5 stars) for different aspects of the Climate Warming Debate Kit: Relevance to the curriculum, relevance to other school outcomes, balance of the views in the Kit, quality of the lesson plan, usefulness of the supporting resources, and accessibility of language.

How would you rate the Climate Warming Debate Kit for the following?



The Climate Warming Debate Kit scored highly across all areas with average scores of at least 4.1/5 in all aspects. The most common response was 5/5 for all aspects of the Debate Kit except for the accessibility of language, where the most common response was 4/5.

Additional feedback

Teachers were asked what they liked about the Climate Warming Debate Kit, how they thought the Kit could be better, as well as for any additional comments or feedback that they would like to share.

Teachers appreciated the self-contained, ready-to-use format of the Debate Kit, as well as the inclusion of follow-up resources for extension work.

Teachers also appreciated the topicality of debate and its relevance to current events.

"It was great to use alongside COP26 and link to real time events." Alison Ackroyd, Teacher, Feedback survey

"Clear and relevant to the issues."
Sarah Rayment, Teacher, Feedback survey

"Got kids talking about climate change in relation to their lives. Prompted much discussion."

Meryl Batchelder, Teacher, Feedback survey

"I like having the printed kit as this means there is minimal prep time." Teacher, Feedback survey

"It was easy for my teachers to add into their lessons." Teacher, Feedback survey

Suggested improvements included further and clearer curriculum links, suggested alternative lesson plans, and the possible inclusion of suggested preparatory work for the students.

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