



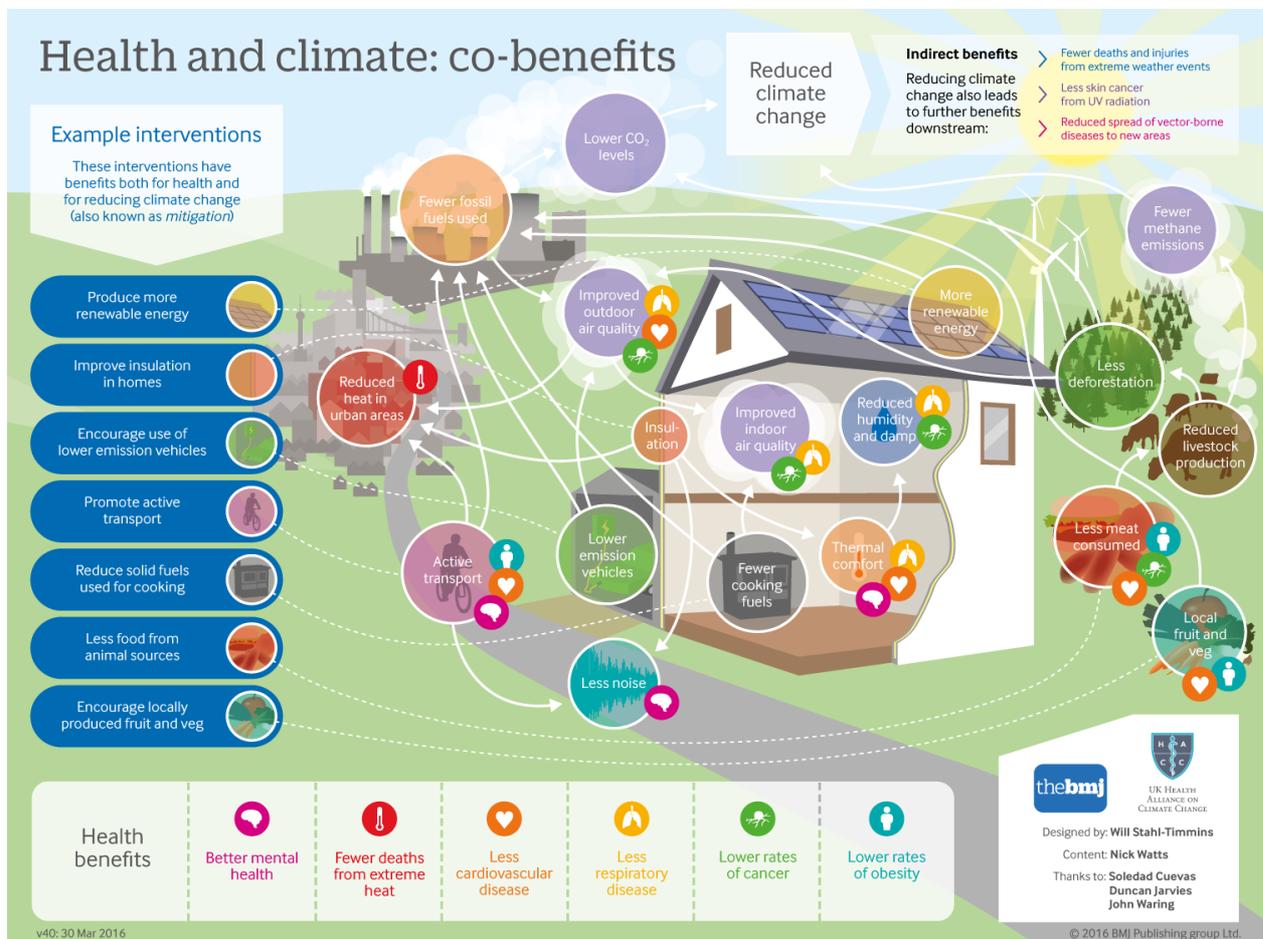
Reflections on the 'Health and Climate' Curriculum Artefact

The Artefact

The 'Health and Climate' curriculum artefact is an *infographic* created by **the BMJ** to display co-benefits to health and climate through interventions which could reduce climate change.

It is 'placeless'. It does not refer to any specific place and in this sense could even be thought of as no-geographical.

However, it has been used as a curriculum artefact because it focusses on a range of people-environment interrelationships.



Website: <http://sandpit.bmj.com/graphics/2016/cobenefits-v40.png>

Evaluation Questions and Reflections

A. On the Subject Matter

1. Which specific place(s) are studied?

Place as location: this artefact does not directly link to one location – it is indeed ‘placeless’ (and could be criticized on these grounds). However, the artefact itself creates place as an idea: eg by suggesting generic features of an idealised world. In using this artefact two scales are referred to: global effects and impacts; national effects and impacts focused on the UK.

2. Where is the contextual geographical knowledge?

The contextual geographical knowledge is absent. The teacher may be able to exploit this ‘absence’ to highlight that the impacts of climate change and global warming are indeed place specific, and vary.

3. Where is the powerful geographical knowledge?

Powerful geographical knowledge is found through *the use* of the artefact. There are numerous opportunities to explore and ‘test’ generalizations about,

- Short and long term impacts on a global scale.
- Short and long term impacts on a national scale
- Direct and indirect impacts of climate change e.g. is climate change linked to diseases of affluence (e.g. coronary heart disease, obesity)
- Interconnected responses (investment in renewables reliant upon development)
- Responses to climate change (e.g. identifying possible human contributions to the greenhouse effect).

4. What are the ways in which geographical thinking deepens or extends understanding of the theme, issue or place?

Climate change is a process. By scaffolding the students to ‘think geographically’, this artefact allows students to extend their understanding of climate change as an issue. Geographical thinking allows students to deepen their knowledge of the process of climate change alongside the interconnected effects, impacts and responses. Students are able to tie together knowledge of environmental wellbeing, energy supplies, health and development differences.

B. On the students' experience

1. In what ways are the students' prior experience/knowledge accessed and taken into account?

Before the artefact is introduced students' existing knowledge and preconceptions regarding climate change are discussed. This is then expanded upon when the artefact is shown, since some pictures of the infographic spark responses from the students.

2. In what ways are the theme, issue or place made 'accessible' to the students?

The infographic is supported by definitions and explanations of the key ideas including climate change and global warming. The infographic is also supported by using the BMI website which discusses this issue at greater length.

3. In what ways are students challenged to think beyond their current (or 'everyday') understandings?

Students are challenged to think beyond their everyday understandings as they are challenged to think of the broader issues of climate change. Plus, they are being challenged to think of potential impacts of climate change beyond their everyday existence. When discussing the infographic questions are posed on the worth of the artefact itself, but also on the students' viewpoints and responses to its 'messages'.

4. Is it possible to say how students' learning progresses?

The students tend to hold underdeveloped or tentative viewpoints regarding climate change: for instance, that it is beyond our capacity to 'do anything' about it. Their learning progresses by understanding the science (eg explanations for some of the links shown on the infographic) and then applying this to evaluate the infographic.

5. How does this theme, issue or place study contribute to the wider curriculum aims?

Students are able to make better sense of the potential impacts of climate change through the critical evaluation of a 'public information' source.

C. Teachers' pedagogic choices and actions

1. What has the teacher done to generate a 'need to know', enthusiasm or motivation?

The infographic is an alternative way of considering impacts of climate change: the teaching strategy is to take a public information source, which may be seen as unusual or novel, as a starting point. Although the lessons described in the video are teacher-led, the infographic suggests many questions and avenues of investigation.

2. In what ways have the teacher supplied data for students to assimilate, process, transform and communicate?

The infographic does not contain specific *geography* – but it does act as a 'hook' which students can keep referring to. It provides students with a large amounts of statements to critically assess, *through thinking geographically* about the information.

3. How is the content sequenced – and how is this justified?

This lesson is inductive. Any generalizations arrived at come from the statements initially shown on the infographic. This is more powerful than presenting the impacts as 'facts' to take away, since it encourages critical evaluation of impact.

4. How does the teacher lead the learning (including exposition), and how is this balanced by more 'pupil centred' learning activity?

The teacher carefully sets up the activity with the students to make the aims of the lessons understood. The teacher is vital in guiding the interrogation and analysis of the data. The teacher clearly needs to feed additional 'factual' data into the lesson as well as appropriate additional sources. Without the teacher's guidance and leadership, the infographic may result in only superficial knowledge gains.