



## **Climate change education: science and sustainability**

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Teaching about climate change is relevant to many different subjects, in particular the physical and geographical sciences. Due to the complex and inter-related nature of both the scientific and sustainability issues involved, climate change education benefits from a broad approach in order to help students understand the interactions and complexities of the issues. However, teachers can find the prospect of teaching about climate change education both daunting and challenging due to this complexity, the rapidly moving scientific research and the prolific, often incomplete, biased or sensationalized media coverage. Climate change education also offers distinctive educational opportunities through allowing clear linkages to be made between subjects such as the physical sciences and geography, as well as the life sciences, providing a vehicle to counteract the tendency to see subjects in isolation and instead develop more holistic and deeper learning and understanding. A cross-discipline approach to climate change education can also be beneficial to the different disciplines for example further embedding elements of scientific enquiry within the teaching of geography, particularly at earlier levels. Being such a topical subject, climate change education also offers a way of inspiring students and maintaining interest through context-based teaching of fundamental concepts within disciplines. Climate change education at all levels also offers the opportunity to link the curriculum with both the campus and community, hence working towards a more sustainable society.

We provide examples of a range of innovative teaching materials and resources that can be utilized by teachers in the physical and geographical sciences. These materials show how the topic of “climate change” can be used to cover core science concepts

in a very stimulating and topical context, and be used to embed fundamental science and sustainability concepts into geoscience-focused climate change coverage, whilst providing opportunities to explore ways of 'educating for sustainable development'.