

Teaching about

# Climate change

in Irish Primary Schools



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# Why teach about climate change?

**Evidence is mounting that climate change is one of the most pressing threats to human, animal and plant life on earth.**

The Intergovernmental Panel on climate change (IPCC) concludes that ‘warming of the climate system is unequivocal, and since the 1950s, many of the observed changes are unprecedented over decades to millennia. The atmosphere and ocean have warmed, the amounts of snow and ice have diminished, and sea level has risen.’ These changes have resulted in a number of detrimental effects on life on earth. Weather patterns have become more erratic and more extreme, with typhoons, droughts and floods severely impacting on various parts on the globe, and in particular on vulnerable people and communities. Ireland, too is at risk of the adverse effects of climate change, which may lead to a rise in sea level, more intense storms, more rain, increased flooding, water shortages in the summer (particularly in the east of Ireland) and changes to the plants and animals.

The effect of climate change on plants severely threatens the ability of humans to grow and source food, and places other species at a risk of extinction, disturbing natural eco-systems. The consequences of climate change will have particular impacts

on the lives of children and young people. Research indicates that climate change further represents a threat to the rights of children. Children will be at greater risk of injury or death during natural disasters, their right to education compromised in the associated emergencies and their right to health and development undermined by the effects of climate change. This risk makes climate change an issue of intergenerational justice. If temperatures continue to rise at current rates, species will become extinct and weather will become more extreme, directly placing human life in danger.

Climate change does not affect everyone equally. Those who are poorest and most vulnerable, yet have contributed the least, are most impacted. It has been suggested that climate change needs to be foregrounded in education and to be approached from different perspectives across the curriculum. Traditionally, issues around climate change have been explored through subjects such as science and geography. However, calls are increasing for a cross curricular approach to the issue. Research suggests that teaching

and learning about climate change should include not only scientific knowledge and understanding, but also a more holistic citizenship-based education. Climate change concerns personal values and requires collective action, systemic reform and innovation. Climate change education therefore involves developing learners' skills and aptitudes to enable critique, solidarity, political engagement, ingenuity and openness to change.

The enormity of the climate change challenge can be overwhelming, creating a 'head-in-the-sand' reaction. Exploring learners' feelings and acknowledging their fears and emotions is therefore an essential element of effective climate change education. Such education needs to empower learners to take action and support decisions which minimise the catastrophic effects of climate change. Knowledge, skills, values, feelings and actions are all key components in teaching and learning on climate change.

It is imperative that action is taken quickly. Political developments in recent times have suggested a backwards shift toward climate change denial and a "business as usual" approach, despite the mounting evidence of the harmful effect of climate change, and the best efforts of a number

of governments and civil society groups to raise awareness about and combat the issue. In the face of the United Nations Sustainable Development Goals, which place a considerable focus on climate and the environment, progress is worryingly slow.

The reality of the threat of climate change has been evident for 40 years now, and it is incumbent on all with a voice to lend theirs towards action. At a time when the Irish primary curriculum is undergoing reform, it is vital that all efforts are made to ensure the holistic inclusion of climate change education therein. Not only is it a matter of scientific and historical enquiry, but also a matter of justice. Concurrent to this is the risk that climate change poses to those who come after us.

This document aims to put forward a whole school and community model for climate change education, which is cross curricular. It aims also to serve as a useful and practical tool for both educators and policy makers, in the context of curricular reform, to meaningfully include CCE into curricula and teaching, both implicit and explicit.



**IF TEMPERATURES CONTINUE TO RISE AT CURRENT RATES, SPECIES WILL BECOME EXTINCT AND WEATHER WILL BECOME MORE EXTREME, DIRECTLY PLACING HUMAN LIFE IN DANGER.**

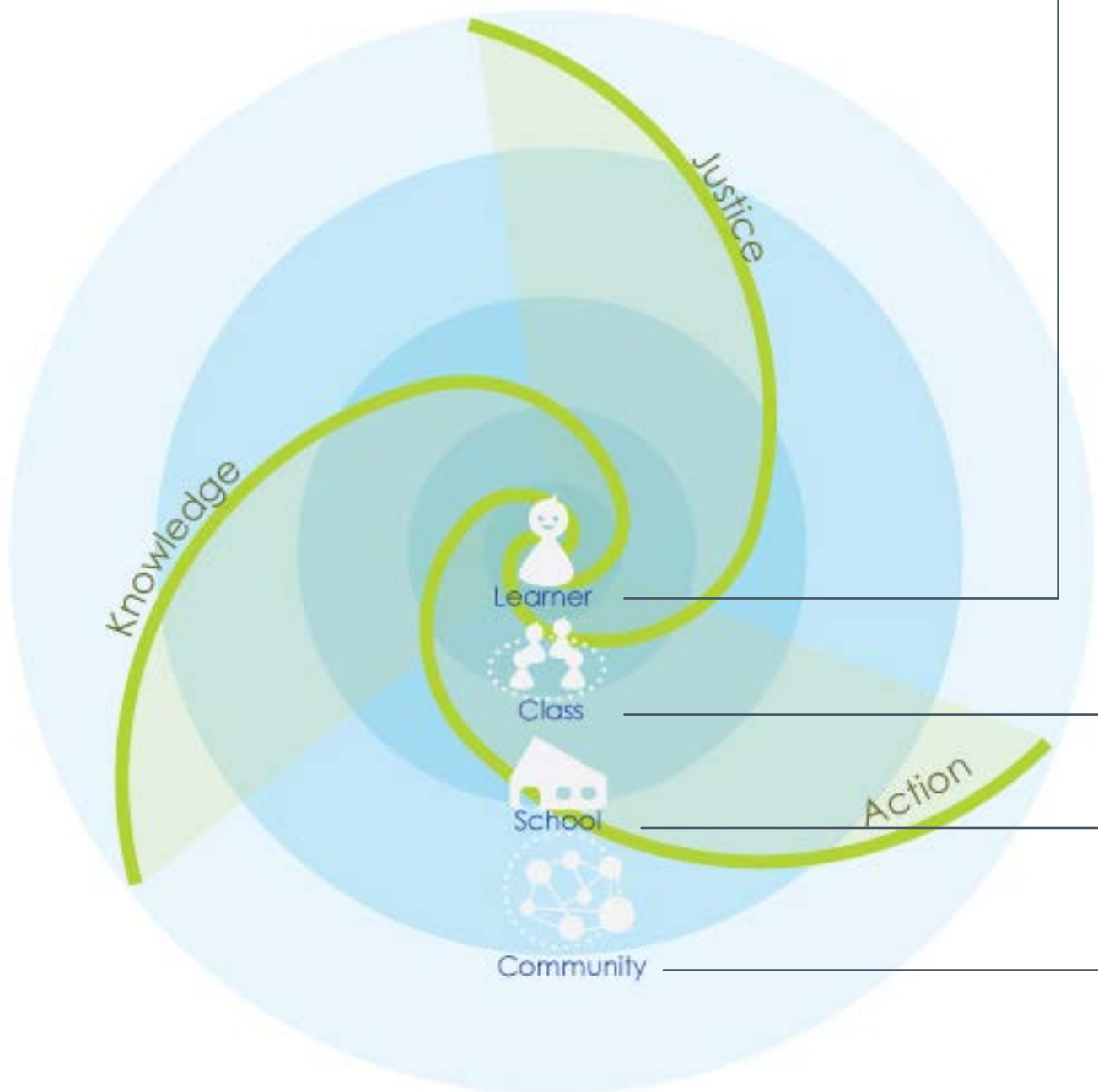


# Key elements of climate change education?

This table outlines the development of key knowledge, skills and values which are central to climate change education.

Knowledge and Understanding	Skills	Values and Attitudes
Sustainable development	Creative and critical thinking	Concern for the environment and commitment to sustainable development
Human Rights	Co-operation and conflict resolution	Belief that people can bring about change
Globalisation and interdependence	Ability to manage complexity and uncertainty	Respect for people and human rights
Power and governance	Informed and reflective action	Commitment to social justice and equity

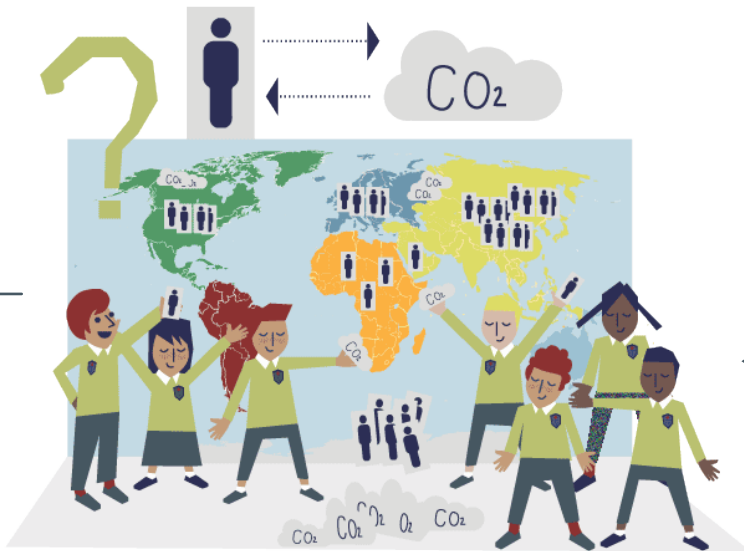
# How might climate change education look in a Primary school?



# Creating a culture of climate change education at class, school and community level

## Learner ►

The individual learner can explore climate change and imagine ways in which we can tackle it, through reading and research



## ◄ Class

At a class level, climate change can be explored across the curriculum, and solutions developed and discussed together

## School ►

Schools can take collective action to explore and combat climate change through a range of projects



## ◄ Community

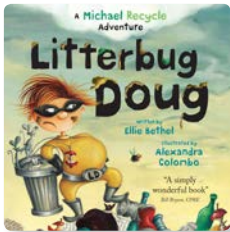
Communities can make connections with schools and other groups to support and collaborate in Climate Action



See page 8 for explanation of examples ►



# Climate change education in action



Choose books with an environmental theme and explore how these themes may link back to climate change. Some ideas from junior class teachers include:

- The Call of the Sea
- What does it mean to be green
- Litterbug Doug

This school in Skerries created a mural in their local community to raise awareness of the effects of climate change on communities around the world.



This class had a talk on how climate change can affect biodiversity and put some species in danger, and ways we can protect these species.



This senior class worked on a project which explored how the emission of CO<sub>2</sub> is affecting the climate around the world.





This class did a project on how climate change is affecting different species.



One infant class made a promise chart where they thought of ideas for changes they could make in their own lives to fight climate change.



This school grew their own garden to see first-hand the effects of climate change on growth, and to learn about sustainability and sustainable growth of food.



# useful links

Climate change education, UNESCO:

<https://en.unesco.org/themes/education-sustainable-development/cce>

Creating Futures, Climate Change Education for Senior Primary:

<https://www.dcu.ie/chrce/news/2016/sep/creating-futures-climate-change-education-for-senior-primary.shtml>

Education for Global Citizenship: A Guide for Schools:

<https://www.oxfam.org.uk/education/resources/education-for-global-citizenship-a-guide-for-schools>

IPCC: Intergovernmental Panel on Climate Change:

<http://www.ipcc.ch>

Trócaire Climate Change Education resources:

<https://www.trocaire.org/getinvolved/education>

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