

# Getting started with climate change education

Amy Budd – Head of Brand

Charlotte Colucci – Head of Community & Advocacy

Judith Roberts – Curriculum Programmes Manager

Laura Kahwati – Education Futures Manager

12 March 2025

# Housekeeping

- Microphones & cameras off.
- Use the Q&A function in the toolbar to send us your questions.
- Like the questions you want answered (we will prioritise those with the most 'likes').
- Q&A session will be at the end of the webinar.



## Getting started with climate change education

- Please put your name, location and motivation for joining today.
- We're going to start by sharing why we believe climate change education is critical and then invite you to tell us where you are at with climate change education.
- Then we'll show you how we're embedding climate change education across the Cambridge Pathway and introduce you to our Getting started guide.



"As the world faces a climate crisis,  
education must be part of the  
answer."

**Christine Özden**

Cambridge's Global Director for Climate Education



## Education is key to tackling the climate crisis

Together with Cambridge schools, we want to:

- **empower young people** with the skills and knowledge to take action on climate change
- **amplify student voices** and develop their critical, creative and communications skills
- **inspire learners to solve problems** and consider the challenge from global and local perspectives.



# Poll: Where are you with climate change education?



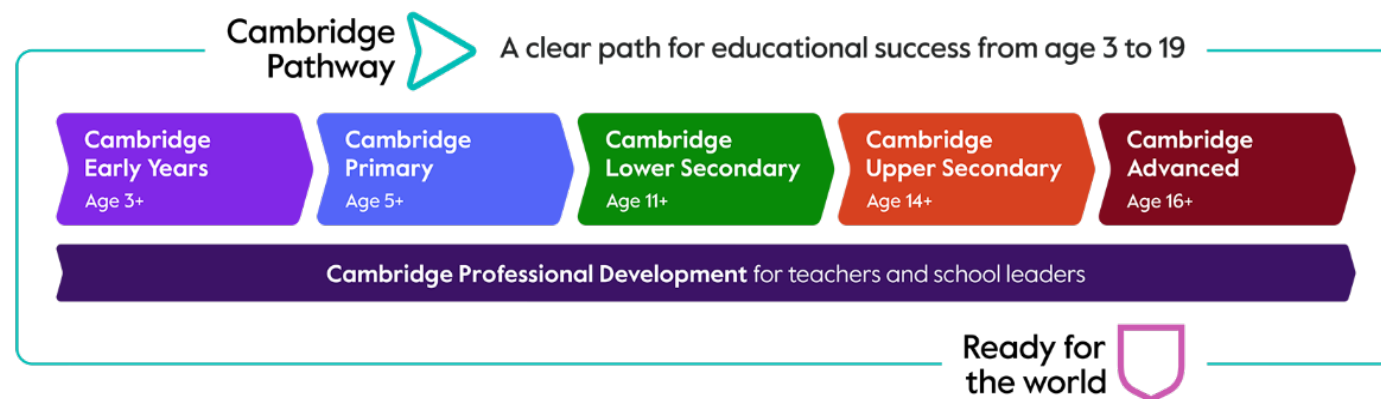
- What subject(s) do you teach?
- Have you started to embed climate change education into your lessons?
  - Yes
  - Not yet
  - Just starting
- Is climate change education a priority across your school?
  - Yes
  - Not yet
  - Just starting

# Climate change education across the Cambridge Pathway

# Climate change education is embedded in the Cambridge Pathway

You will find:

- Climate science
- Caring for ourselves, others and the planet
- Evaluating information and sources
- Making a positive difference
- Insights and opportunities from different subject disciplines.





# Progression in climate change science

## Cambridge Early Years

Age 3+

Things I can see in the sky (e.g. clouds)

The weather can affect my plans (e.g. what I choose to wear)

I can care for myself, plants and animals

## Cambridge Primary

Age 5+

Greenhouse gases, the atmosphere, chemical reactions

Climate is different to day-to-day weather. Climate can change

Humans can cause or solve environmental problems

## Cambridge Lower Secondary

Age 11+

Carbon cycle describes chemical reactions that change CO<sub>2</sub> levels in the atmosphere

Atmospheric change causes climate change

Energy resources can be renewable or non-renewable

## Cambridge Upper Secondary

Age 14+

Sources & effects of atmospheric pollution by methane & CO<sub>2</sub> (Biology & Chemistry)

Global warming due to carbon dioxide and methane (Chemistry)

Energy resources and electrical power generation (Physics)

## Cambridge Advanced

Age 16+

Climate change and biodiversity (Biology)

Catalytic converters  
Reactions of atmospheric pollutants (Chemistry)

Electromagnetic induction (Physics)

# Caring for ourselves, others and the planet

## Cambridge Early Years

Age 3+

Be aware of their own feelings and rights, describing these to an adult

Show some understanding of how to dress appropriately for the weather outside

Adapt to the rules and behavioural expectations for different contexts

Begin to build strategies for resolving conflicts with others, for example, finding a compromise by sharing

## Cambridge Primary

Age 5+

Practise strategies they can use when self-managing unpleasant or intense emotions

Understand the effects of extreme heat and cold and how to mitigate them

Identify ways in which they can behave more sustainably

Demonstrate respectful behaviours with others who have different attitudes, experiences or traditions to their own

## Cambridge Lower Secondary

Age 11+

Understand what 'resilience' means and identify strategies which support them to become more resilient

Understand the effects of extreme weather conditions and how to mitigate them

Explore how sustainability can impact wellbeing

Identify ways in which they can respectfully articulate their thoughts and attitudes, even when they differ to others

# Developing and assessing skills to respond to climate change

Cambridge Global Perspectives™ prepares learners to respond to global issues where they will encounter different perspectives.

1. They learn to evaluate information carefully and respectfully, deciding who and what to trust. This is crucial for dealing with fake news, fake science, and greenwashing.
2. They work collaboratively to make a positive difference in their community.



# Insights and opportunities from difference subject disciplines (Business for 2027)

- Environmental content topics such as sustainable production and the use of renewable energy in the production of goods and services.
- Learners will gain an understanding of how and why businesses respond to environmental issues.
- This develops learners' awareness of sustainability and environmental issues within business, both locally and globally.



# Getting started with climate change education

# Getting started with Climate change education



Getting started with climate change education



## Leading, learning and teaching with Cambridge

Below you will find guidance and resources to support leadership, learning, and teaching at your school. Each theme offers resources in various formats – articles, videos, and podcasts – to suit your chosen approach.



### Active learning

Active learning is when learners participate in the learning process by building knowledge and understanding.

[Read more](#)



### Assessment for learning

Assessment for learning is an approach which creates feedback for students and teachers to improve learning and guide their next steps.

[Read more](#)



### Behaviour for learning

Behaviour for learning involves understanding and developing young people's behaviour that focuses on their relationship with their self, with others and with the curriculum.

[Read more](#)



### Curriculum

Guidance for schools and school leaders, including curriculum design and developing the Cambridge learner attributes.

[Read more](#)



### Inclusive education

Inclusive education is when a school educates learners from differing backgrounds or various abilities that not only incorporates but celebrates diversity.

[Read more](#)



### Learner wellbeing

Learner wellbeing is a complex psychological state that can consider how learners feel and function in the context of education.

[Read more](#)



### Metacognition

Metacognition describes the processes involved when learners plan, monitor, evaluate and make changes to their own learning behaviours.

[Read more](#)



### Oracy

Oracy refers to the skills involved in using spoken language to communicate effectively. Teachers help learners develop their oracy skills through a range of approaches.

[Read more](#)



### Reflective practice and school evaluation

Reflective practice helps teachers connect experiences, enhancing student progress. School evaluation is supported by a clearly defined set of standards.

[Read more](#)



### Teaching with technology

# What's in the guide?

[Back to top](#)
[What is climate change education?](#)
[The benefits](#)
[Challenges and misconceptions](#)
[Research](#)
[Practical tips](#)
[Next steps](#)
[Further reading](#)
[Glossary](#)

## What is climate change education?

*Climate change education 'helps people understand and address the impacts of the climate crisis, empowering them with the knowledge, values and attitudes needed to act as agents of change'*

UNESCO

Education acts as a critical tool to address the threat of climate change by:

- building knowledge about the causes and effects of climate change;
- helping people understand the consequences of climate change;
- developing skills to consider complex issues and think critically;
- nurturing skills needed to take action; and
- shifting behaviour and attitudes towards more sustainable lifestyles.



## What are the benefits of climate change education?

## What are some challenges and common misconceptions?

## What does the research say about climate change education?

### References and further reading

- Biesta, G. (2019). What is the educational task? Arousing the desire for wanting to exist in the world in a grown-up way. *Pedagogia y Saberes*, 50, pp.51-61.
- Cook, J., Ellerton, P. and Kinkead, D. (2018). Deconstructing climate misinformation to identify reasoning errors. *Environmental Research Letters*, 13 (2). <https://doi.org/10.1088/1748-9326/aaa49f>
- Flanagan, C., Gallay, E., Pykett, A. and Smallwood, M. (2019). The *Environmental Commons* in Urban Communities: The Potential of Place-based Education. *Front. Psychol.* 10:226. <https://doi.org/10.3389/fpsyg.2019.00226>
- D, Dixon (2022). *Leadership for Sustainability: saving the planet one school at a time.* Independent Thinking Press.
- Hung, C. C. (2022). *Climate Change Education. Knowing, Doing and Being.* Routledge Research in Education. Taylor and Francis.

### Glossary

**Adaptation:** Actions taken to adjust to the effects of climate change, such as building sea walls or changing agricultural practices.

**Atmosphere:** The layer of gases surrounding the Earth, essential for life and regulating temperature.

**Biodiversity:** The variety of living things on Earth, vital for healthy ecosystems. Climate change threatens biodiversity.

**Carbon dioxide (CO<sub>2</sub>):** A greenhouse gas which occurs naturally in the atmosphere and is a significant contributor to climate change. Human activities are increasing CO<sub>2</sub> levels.

# Developing resources with our community



**Paola Izzi**  
Teacher & Exams Officer  
Scuola Europa, Italy



**Samson Mudzudza**  
Teacher & Exams Officer  
Gateway High School, Zimbabwe



**Susan Holmes**  
Principal  
Nehru World School, India



**Pooja Bhatia**  
Principal, The Ardee School  
New Friends Colony, India





# Listening to our community

# Poll: What are the benefits and challenges

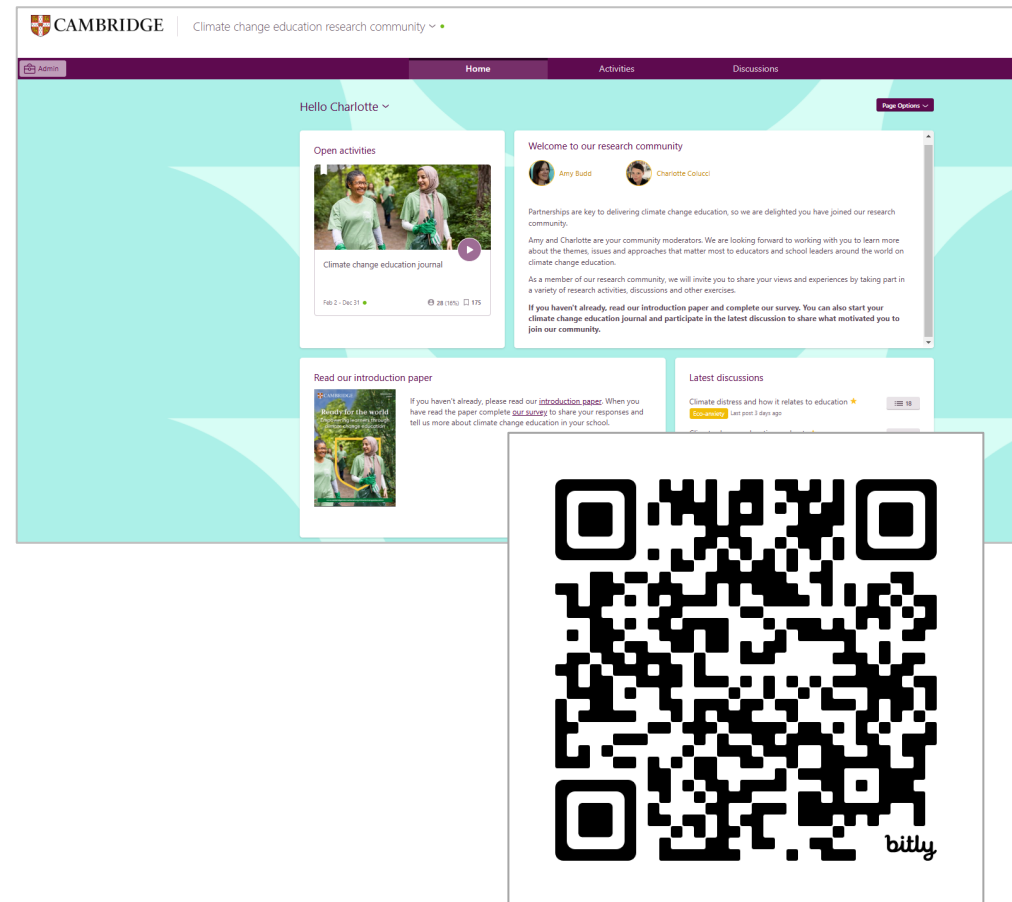


- What do you think are the main benefits of climate change education?
- What challenges do you see and how can Cambridge help?
- What are your next steps?

# Join our climate change education research community

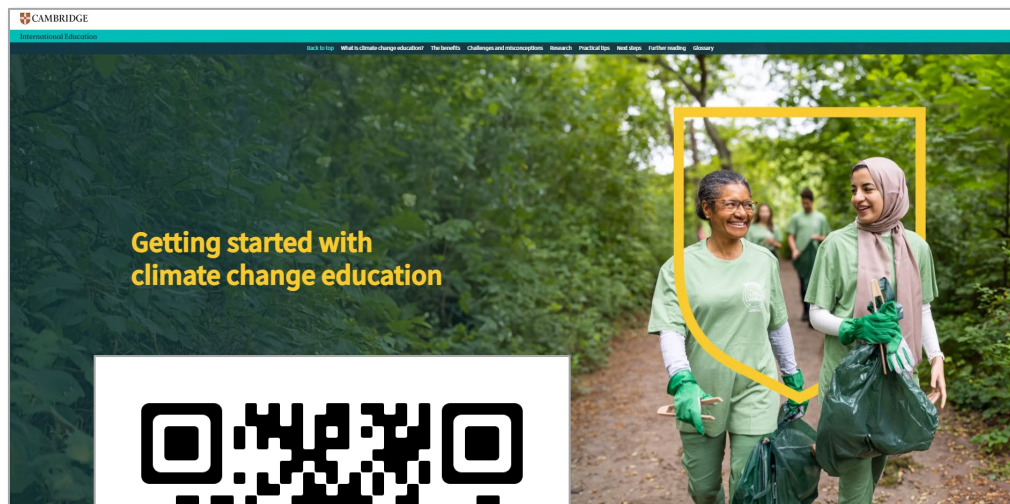
Partnerships are key to delivering climate change education.

- Our ambition is to build an educational approach by listening to our global community of educators and learners to understand their requirements.
- One way of doing this is through our research community.
- Members invited to share views and experiences by taking part in a variety of research activities, discussions and other exercises.
- Insights used to shape our work – guides, exclusive webinars and product development.





# Working together to **make change happen**



We want to learn more about the themes, issues and approaches that matter most to our schools and learners:

- **Read our introduction paper** to find out how, together, we can empower learners through climate change education.
- **Read our report**, written with Cambridge Zero and engineering experts, about how we can empower the engineers of the future to tackle climate change.
- **Download our ‘Getting started with climate change education’ guide** for the theory, benefits and practical tips to get started.
- **Join our research community** to help us understand more about the themes and issues that matter most to you.



CAMBRIDGE

Any questions?



CAMBRIDGE

Thank you!