



Delivering high quality climate change, nature and sustainability education **for all**

Beyond the curriculum and assessment review

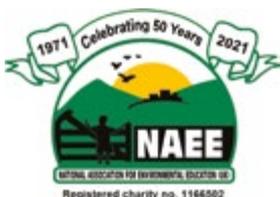
Introduction and context

The recent Curriculum and Assessment Review and the government's response to it recommend a significant strengthening of Climate Change, Nature and Sustainability (CC, N & S) education in England. While this strengthening, including within the curriculum for geography, the sciences, citizenship and design & technology is welcome and timely, it is clear that there is a great deal of wider work to be done if the whole education system is to deliver high quality CC, N & S education for all.

To consider how to deliver this wider change, the Royal Meteorological Society, the University of Reading, University College London, the National Association for Environmental Education, Global Action Plan, and the Council for Subject Associations organised a workshop on January 26th 2026, at the Royal Geographical Society. Workshop participants represented professional bodies, subject associations, assessment authorities and other key stakeholders.

This document sets out key areas for future development for CC, N & S education and what successful reform might look like for different parts of the sector.

Above all, the new national curriculum and associated resources, exam specifications and professional support for teachers and teacher educators needs to have the flexibility to remain relevant and current throughout the lifetime of the curriculum. It should allow teachers to choose contexts and examples that are of relevance to their students and their communities.



Key questions and answers for delivering high quality CC, N & S education beyond curriculum reform

Through the workshop, contributors identified ten key areas of focus of support for the wider education system to deliver high quality CC, N & S education through and beyond the revised national curriculum and qualification subject content.

Much of this support already exists in some form, and it is important to build on previous work and evidence collected, including that identified in this document. However, to make the most of the curriculum & assessment reform, a number of additional developments are needed. Table 1 summarises our collective evaluation of these.

Table 1. Additional support needed to achieve high quality CC, N & S education

Key area	What additional development is needed?
<p>Resource Creators How do organisations who are turning the new curriculum into schemes of work and classroom resources get support from experts to make sure provision is up to date, accurate and relevant?</p>	<ul style="list-style-type: none"> • A recognised and expected quality control process for new and revised resources from major resource creators ensuring the accuracy, currency and clarity of CC, N & S content and pedagogy. • New and revised resources from major resource creators must have the flexibility to remain up-to-date and relevant as well as for teachers to be able to adapt them to local contexts. • New and revised resources from major resource creators should embed knowledge-rich CC, N & S content within subject-specific frameworks, supporting appropriate disciplinary and cross-curricular skill development whilst being conscious of the values they may activate and reinforce.
<p>Reforms to Qualifications How do qualification authorities ensure that reforms incorporate a strengthening of CC, N & S education beyond the qualification subject content requirements?</p>	<ul style="list-style-type: none"> • Exam specifications that inspire and support teachers and students, with compulsory CC, N & S outcomes. • CC, N & S embedded across topics not solely as one, stand-alone topic. • Specifications that can be updated regularly. • Flexibility for specifications to go beyond the national curriculum in all subjects. • Longer term evolution of assessment to allow for meaningful evaluation of CC, N & S learning. • Qualifications should have integrated skills for CC, N & S education within a disciplinary context.
<p>Enrichment How can education settings be supported to see the benefits of linking the curriculum with enrichment and see enrichment as an important, equitable part of education</p>	<ul style="list-style-type: none"> • Clear guidance on equity to access enrichment: what does 'entitlement' mean in practice?. • Clearer guidance on where CC, N & S fits in the five ambitions for enrichment. • Coherence and sequencing of enrichment with the national and school curriculum. • Support for the workforce to enable confident and equitable delivery.

Key area	What additional development is needed?
<p>Teacher Support How can teachers be supported to deliver the new CC, N & S content in the new curriculum?</p>	<p>Knowledge and Understanding</p> <ul style="list-style-type: none"> • Cover both CC, N & S knowledge and specific pedagogy key to CC, N & S in the ITTECF including within periods of intensive training and practice (ITaPs) for trainee teachers of all subjects. • Appropriate and sufficient high quality training and support for teachers and teacher educators to deliver high quality CC, N & S education in all subjects. • Awareness of and access to high quality CC, N & S resources within the disciplinary context of their subject/ level. • Standard definitions of words and concepts within CC, N & S education (in English and MFL). • CC, N & S included within subject leadership training and CPD. • CC, N & S education training for sustainability leads. <p>Incentive</p> <ul style="list-style-type: none"> • A national curriculum that inspires and empowers teachers and students. • Periodic thematic reviews by Ofsted with appropriate forewarning to schools. <p>Permission</p> <ul style="list-style-type: none"> • Explicit guidance for teachers to encourage them to explore local, national and global current and controversial issues. • Clarity about what neutral/ balanced/ non-political/ impartial teaching looks like in the context of CC, N & S. • Teachers who have confidence, agency and flexibility to adapt and contextualise teaching.
<p>Essential/Optional What is essential knowledge that should be covered in subjects and topics taken by all students and what is for optional subjects/ topics/ levels?</p>	<p>Foundational knowledge about the causes, consequences and solutions of climate change and nature degradation must be included and developed in subjects, topics and levels taken by all students.</p> <p>Changes to P8/EBacc must not negate the impact of national curriculum revisions or undermine the entitlement of all pupils to high quality CC, N & S education.</p>
<p>Solutions Focussed How do we ensure that the solutions focus recommended by both the DfE and the Youth Shadow Panel is not forgotten?</p>	<p>Classroom resources, teacher training/ support and exam specifications must include:</p> <ul style="list-style-type: none"> • More emphasis on renewable and sustainable energy generation, energy efficiency and nature-based solutions in science, geography and D&T. • More emphasis on nature restoration, regeneration, and conservation solutions in science, geography, food & nutrition and D&T. • More emphasis on the ethical issues related to CC, N & S, behaviour change and active citizenship solutions in citizenship and geography. • Critical evaluation of local/ national/ global climate change mitigation and adaptation strategies. • Clear links to the range of careers associated with these solutions in support of Gatsby Benchmark 4 ('Linking curriculum learning to careers') and aligned to market need.

Key area	What additional development is needed?
<p>Coherence and sequencing How do we build thematical/ context links across curriculum subjects and levels?</p>	<ul style="list-style-type: none"> • Big picture overview of what each subject contributes to CC, N & S education with clear purposes of study for each subject. • A well-sequenced national curriculum with subject specific coverage and clear cross-curricula links that minimises repetition and ensures clarity about the level of students’ prior understanding and knowledge. • Standard definitions of words and concepts within CC, N & S education.
<p>Knowledge, Understanding and Skills How can we make sure that the development of content remains knowledge rich? Where do digital, data, green and other skills fit?</p>	<p>Embed “green” and other relevant skills in assessment;</p> <ul style="list-style-type: none"> • Work with a knowledge-rich national curriculum to allow resource and specification providers to bring in skills and understanding. • Big picture overview of what each subject contributes to CC, N & S education including digital, oracy, data, critical thinking, media and other skills in each subject.
<p>Community How does the wider CC, N & S Education community support education settings to deliver high quality CC, N & S education?</p>	<ul style="list-style-type: none"> • Links and collaborative working between resource creators, subject associations, young people and academic & industry experts to ensure quality. • Develop and share case studies. • Provide multi-disciplinary CPD that can be used by whole schools in addition to that for individual subjects.
<p>All Curriculum Subjects How should the statement in the CAR that “Pedagogy has an important role in applying an engaging climate lens to existing curriculum content,” be applied to promote better CC, N & S education in subjects beyond science, geography, citizenship and D&T?</p>	<ul style="list-style-type: none"> • Digital, oracy, data, critical thinking, media and creative skills should be developed within CC, N & S contexts across all national curriculum subjects. • Assessment and resource providers must include CC, N & S applications, contexts and examples in all subjects. • The national curriculum should have the flexibility to explore key curriculum content through a CC, N & S lens whilst ensuring equity of delivery. • Include as CC, N & S as compulsory content within ITTECF framework including both subject knowledge and specific pedagogy.

What might success look like over a five-year period?

The need for high quality CC, N & S education is pressing. We think that a five-year timescale is an appropriate period in which to consider a first assessment of the successes and failures of policy change. Overall, the aim would be to see CC, N & S education fully embedded across all education settings.



Existing surveys and frameworks could be used as sources of evidence about the efficacy of this approach including the RMetS Climate Literacy Survey and the new PISA 2029 standards which incorporate measures of CC, N & S Education. Two further suggestions to drive this approach were, first, to collect longitudinal data relating adult sustainability dispositions and behaviours to school experiences and second, for Ofsted to commission a thematic review of CC, N & S education with schools given notice that this will happen.

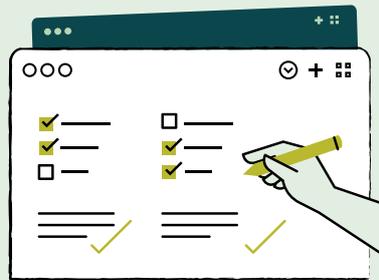
Success is measured differently by the different stakeholder groups within the sector. A truly transformative policy would meet the needs of these different groups in the following ways:

For Students, success would mean harnessing an intrinsic respect for and awareness of nature, especially beyond primary age when it typically starts to decline, and connecting issues of CC, N & S at local and global scales. They would understand our interdependence with the natural world, the implications of climate change and nature degradation and be able to recognise when they encounter mis- and dis-information about it. Positive and relevant advice about the application of CC, N & S in all jobs including green jobs would be accessible to all and offer hope for them, their community and the environment.

For Teachers, success would mean more professional development opportunities to inspire and help them embed CC, N & S education into their classrooms and more encouragement and permission to innovate from school leaders and curriculum and inspection frameworks. Initial teacher education and early career programmes would be required to include these issues and every school would have a Steering Group which includes teaching staff to lead activities across the school and avoid too much responsibility falling on a single person.



For Education Leaders, success would mean being given mandate/ permission through policy frameworks to make CC, N & S education a school priority, including as a vital interdisciplinary strand through the curriculum. Every school would have a Sustainability Lead who would be appropriately supported and recognised through a National Professional Qualification, other professional development opportunities, regional and national networks, case studies and a career pathway. All school leaders would be supported to develop greater expertise through NPQ programmes.



For those responsible for accountability in education (Governors, Ofsted, etc.), success would mean improved performance in PISA29 and other existing accountability measures. There would be an Environment, Social and Governance framework in every school and a thematic review by Ofsted would be imminent having provided schools with several years' notice. Every setting would have a governor responsible for sustainability with appropriate support. CC, N & S education would be a front-page priority in every school improvement plan and Ofsted would incorporate schools' actions to become more sustainable into their inspection framework.



For Civil Servants, success would mean cross-departmental collaboration over policy relating to all aspects of CC, N & S education (formal and informal), led by sustainability leads in every government department. Guidance which pulls together the evidence about what good CC, N & S education looks like would be regularly updated and fed into statutory guidance and monitoring frameworks (e.g., Ofsted). It was also suggested that in five years' time, an independent body could be established to carry out subsequent curriculum reviews at least every 10 years to safeguard the process against frequent and politically-driven change.

A note on the process

This document was drafted by the organising team, based on previous work (see below), the discussions during the workshop and the areas of development need identified by contributors prior to attending it.

Previous work identified

[Teach the Future Curriculum for a Changing Climate](#)

[Royal Meteorological Society Curriculum for Climate Literacy](#)

[UCL, Global Action Plan, NAEF UK and Council for Subject Associations Key Contributions of Subjects to Climate Change and Nature Education](#)

[CAR report](#)

[Government response](#)

[Youth Shadow Panel final report](#)

[Draft PISA climate literacy framework](#)

[NCEAP/ RMetS Quality Control Framework](#)

[Cambridge University Press & Assessment report: Climate Change Education and the knowledge/ action gap](#)

[Striking the Balance](#)

[Pearson report](#)

[DfE Climate Literacy Report 2024](#)

[CAPE curriculum guides for Science, Geography and Art](#)

[Educating for Social Good](#)

[Geography and Green Skills](#)

[Cambridge University Press & Assessment report: Embedding Climate Change Education in Geography](#)

[Cambridge University Press & Assessment report: Empowering Engineers of the Future through Climate Change Education](#)



Contributors

Emily McRae

AQA

Marianne Cutler

Association for Science Education

Liz Moore

Association for Citizenship Teaching and Co Vice Chair of Council For Subject Associations

Liz Black

Association for Language Learning

Helen Bickford

British Ecological Society

Shelley Monk

Cambridge OCR

Ellen Jameson

Cambridge University Press and Assessment

Katy Wheeler

Centre for Environment and Society, University of Essex

Tony Ryan

Design & Technology Association

Ryan Ball

Design & Technology Association

Dr. Polly Glegg

Economics, Business and Enterprise Association (EBEA)

Michael Hardisty

EngineeringUK

Andrea Macrae

English Association

Louise Davies

Food Teachers Centre

Morgan Phillips

Freelance and Global Action Plan

Steve Brace

Geographical Association

Becky Kitchen

Geographical Association

Megan O'Donnell

Geological Society

Ali Body

Global Action Plan

Maheema Chanrai

Historical Association

Assoc. Prof. Tremaine Baker

History Teacher Education Network

Taj Bhutta

Institute of Physics

Charles Tracy

Institute of Physics

Rachel Hartley

Institute of Physics

Naomi McCarthy

ISM

Alf Coles

Joint Mathematical Council (and University of Bristol)

Leigh Hoath

Leeds Trinity University | Climate Adapted Pathways for Education (CAPE)

Brian Mulligan

Media Education Association

Nicole Cozens

MEI

Abi Marrison

Music Mark – UK subject association for music education

Dr. Gill Brigg

National Drama

Georgia Prasad

Natural History Museum

Sophie Leach

NSEAD

Marlene Wylie

NSEAD/Creative Passion in Action

Graeme Schofield

Oak National Academy

Tosin Oliyide

Pearson

Laura Westcott

Pearson

Flo Ackland

PSHE association

Julia Diamond-Conway

RE Today

Jennifer Brandsberg-Engelmann

Regenerative Economics for Secondary Schools

Lucy Supperstone

Representing afPE from Leadership Skills Foundation

Eleanor Pinches FRMetS

Royal Meteorological Society

Prof. Sylvia Knight

Royal Meteorological Society

Sam McLoughlin FRSA

Royal Economic Society

Simon Pinfield

Royal Geographical Society (with IBG)

Dr. Catherine Souch

Royal Geographical Society (with IBG)

Kelly Smith

Royal Society

Hannah Lings

Royal Society of Biology

Dr. Ashleigh Marshall

Royal Society

Annette Farrell

Royal Society of Chemistry

Zoe Arnold

Students Organising for Sustainability

Taresai Chikomba

Technology Pedagogy and Education Association (TPEA)

Grainne Cassidy

The Classical Association

Sean McQuaid

TIDE Community

Dr. Alison Kitson

UCL Centre for Climate Change and Sustainability Education

Prof. Justin Dillon

UCL/ NAEE

Jo Tregenza

UK Literacy Association

Debra Myhill

UKLA

Dr. Paul Vare

University of Gloucestershire

Prof. Andrew Charlton-Perez OBE

University of Reading

Akasa Pradhan

Young Citizens

Charlie Duckerin

Young Citizens