NATIONAL CLIMATE EDUCATION ACTION PLAN

Climate change is the defining crisis of our generation, and it will be the lived reality for generations to come. Yet many people still do not understand the issue or feel able to respond to it adequately, including the very young people whose future will be most affected.

On 15 September 2021, the University of Reading brought together young people, scientists, teachers and educationalists, policymakers and campaigners at a Climate Education Summit to create this action plan for better climate education in schools and colleges in the UK. This is to ensure all young people today and generations to come are equipped with the knowledge and understanding, and are empowered, to respond to and tackle the climate and ecological crisis facing our planet.

No single organisation is able to take this agenda forward alone and so this joint plan will need to be led and contributed to by different groups and by young people themselves, coming together to make real change possible. The action plan indicates where organisations have offered to lead or contribute to an action.

Implicit in our plan is that better climate education is needed and that this education should not be solely delivered in a single school subject or groups of subjects, nor confined only to academic study – climate change touches all areas of society and so our plan covers education broadly. The focus is on climate education, acknowledging that pressures on the Earth's ecology and biodiversity are strongly linked with climate change. Due to the need to deliver focused action, the plan does not encompass education for sustainable development (ESD) more broadly; this focus does not indicate that development of ESD is not needed. The plan focuses on climate education for young people aged eight to 18; this is not to diminish the importance of climate education for younger children, rather, to provide an initial point of focus.

Our ambition is that the action plan will affect positive change in climate education for young people throughout the UK. We acknowledge that variation exists between and within the four nations, and our aspiration is that all young people will be provided with comprehensive and upto-date climate education irrespective of where in the UK they live.

We fully recognise the challenges that schools, colleges and teachers face in finding time and resources to support climate education, particularly as they deal with the recovery from the COVID-19 pandemic. Nonetheless, the issue is pressing and we need to tackle it now. That is why it is so critical that we work together and that the action plan must be co-owned by teachers and school leaders, policymakers, climate experts and young people along with educational leaders, so that it is realistic and suitable for the modern classroom.



1. Everyone involved in the education of children in school and college settings should be encouraged and supported to access accredited continuing professional development (CPD) to improve their personal understanding of up-to-date data and science of our changing climate and the impacts of these changes. This is intended to address an identified gap in understanding and confidence to teach young people the knowledge and skills essential to preparing for the challenges of a changing climate. Given the wide-ranging ramifications of a changing climate, access to this training should be for school and college staff of all levels and subjects, including those who interact with young people but are who not class teachers, as well as school leaders and governors. In addition to initial training, there should be the opportunity for school and college staff to update their understanding on a periodic basis as climate science evolves. The UK climate science community should commit, collectively, to engage with this CPD activity at scale.

The Department for Education (DfE) is committed to supporting CPD for primary and secondary teachers; in the first instance this will focus on science teaching.

[Lead: STEM Learning. Contributions: DfE; Students Organising for Sustainability UK (SOS-UK); Big Education; Office for Climate Education (OCE); Ashden; Outwood Grange Academies Trust; Association of Colleges (AoC)]

2. All teacher trainers and initial teacher trainees should be able to access training that empowers them to effectively incorporate climate education within their teaching across all levels and subjects. This is to enable teachers to understand where and how to access verified information, and to consider the potential impact of a changing climate within the context of their level/subject of expertise such that climate education can be appropriately and meaningfully incorporated into their teaching without exacerbating eco-anxiety.

[Lead: University of Reading. Contributions: Royal Meteorological Society (RMetS); Met Office; SOS-UK; Green Schools Project; Ashden; Education and Training Foundation; ClimaTalk; STEM Learning; Outwood Grange Academies Trust]

3. Teachers and school leaders should be encouraged and empowered, both at a national and local level, to ensure time and space within and beyond the teaching day is included for climate education. The challenges that schools, colleges and teachers face as they deal with the recovery from the COVID-19 pandemic are substantial. These challenges notwithstanding, time, space and permission have been identified as barriers to delivering content that is outside of, or minimal within, the curriculum. Teachers and school leaders should be encouraged and supported to connect with others to share creative approaches to overcoming such barriers, through the networks discussed in point 7.

[Contributions: National Governance Association; Green Schools Project; Ashden; Education and Training Foundation; Outwood Grange Academies Trust]



4. Every school and college should identify a senior staff member to lead on climate education and provide them with support and funding. Where schools and colleges are organised as groups in, for example, multi-academy trusts, this role might be taken by one member of staff or a team working across the organisation. The focus of this role is specifically on climate education. Many institutions have a lead for climate and/or sustainability with a focus on practical actions; whilst important and not to be replaced, it is critical that leadership for climate education is both in addition to and distinct from this. The role of a climate education lead will help schools and colleges to access the best and most up-to-date support for their climate teaching. However, there should be a link between education and a school/college estate, given lessons can be learnt from buildings and estates not just in them and local action can be used to bring teaching to life. Funding for this role should be identified to allow a specialist set of skills and competencies to be developed and recognised.

[Contributions: Ashden; Outwood Grange Academies Trust]

5. A structured programme or climate award for schools, colleges and youth organisations should be developed, providing a national focus to a range of extracurricular activities and supporting resources to aid delivery. Given the engagement of young people in climate issues, there is a need and an opportunity for existing national networks to broaden their reach. Schools, colleges and other youth organisations can showcase the work that they are doing to understand and tackle the climate crisis through gaining the award, which in turn will generate pride and raise awareness. It is vital that the award is accessible to all young people, regardless of background, and this should be made possible through a clear set of central awarding processes and support.

DfE's draft Sustainability and Climate Change Strategy sets out plans for a Climate Award to provide a structured route through all the existing awards and activities currently offered by the many excellent stakeholders. DfE will develop the detail by working with stakeholders and children and young people before it is launched in autumn 2022.

[Lead: DfE. Contributions: STEM Learning; Met Office; Ashden; Outwood Grange Academies Trust; AoC]

6. A national scheme of quality assurance of teaching resources for climate education should be developed. Through the hard work and innovation of many organisations there is no shortage of climate education materials available to teachers. A major challenge to use of these resources is confidence in their scientific and pedagogical quality. The UK should have a national scheme to give formal approval to climate education resources that gives teachers confidence in resources that they might use and adapt to their own educational context. Ensuring these resources are available in a small number of trusted repositories would help make climate education efficient and widely available. A process of regularly reviewing resources should be established to



ensure that they draw upon the latest research and match suitable pedagogical standards.

DfE's draft Sustainability and Climate Change Strategy states that by 2023 DfE will give free access to high-quality curriculum resources, so that teachers in all phases and subjects can confidently choose those that will support the teaching of sustainability and climate change. They will deliver this through clearly signposted and approved platforms.

[Contributions: University of Reading; RMetS; Global Action Plan; STEM Learning; OCE; DfE; Ashden; ClimaTalk; Outwood Grange Academies Trust]

7. A regular national meeting of the dynamic, well-supported, national networks of educators, scientists and young people should be held, to share ideas and promote collaboration among representatives of these groups. In the last two years young people have motivated many in the education system, as well as friends and family, to improve their climate education. As a result, a number of national, regional and local networks have developed to allow discussion and promotion of climate education. There is no shortage of energy and willingness to develop climate education in the UK, but there is a danger that, without greater collaboration and coalition-building, some momentum and direction is lost. Representatives from these networks should meet at least annually to share ideas and best practice and pool resources to ensure the reach of all the networks is as broad as possible.

[Lead: University of Reading and STEM Learning. Contributions: Met Office; AoC; Education and Training Foundation; ClimaTalk; Outwood Grange Academies Trust]

8. Professionals working in climate research and policy, from science and non-science disciplines, should pledge a proportion of their working time to providing help to teacher-led climate education initiatives. Much world-leading climate research is done in the UK and we are fortunate to have so many internationally recognised climate experts in our universities, national research centres and government departments. Unlocking and connecting this expertise to improve teacher-led climate education is often difficult through a lack of coordination rather than a lack of commitment by the people involved. To break down barriers between climate education organisations and climate experts there should be a voluntary pledge scheme by which climate experts can publicly commit to spending a specified proportion of their time on climate education, through existing networks like the STEM ambassador scheme. There are many ways that climate experts could contribute to the climate education endeavour, not just direct interaction with young people in schools and colleges. This commitment should be encouraged by funding bodies and employers.

[Lead: University of Reading. Contributions: Met Office; STEM Learning; COP26 Universities Network; The Brilliant Club; Global Action Plan; RMetS; Ashden; Outwood Grange Academies Trust]



9. A national, guiding framework for all educational providers that outlines compulsory climate education for all young people via schools and colleges should be developed and implemented. Many teachers and educators, through schools and colleges, are teaching young people about our changing climate and the challenges it presents. However, the breadth and quality of climate education is inconsistent. To reduce this current 'lottery', a framework for adequate climate education should be mandatory.

[Contributions: RMetS; AoC; Ashden; Education and Training Foundation; Outwood Grange Academies Trust]

