

A new statutory requirement for access to and engagement with nature within education

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The Education and Learning Policy Group at Wildlife and Countryside Link aims to further the policy agenda of greater inclusion of nature within all education settings. This policy paper is intended to set out the Group's proposed policy approach in order to initiate discussions with stakeholders.

Executive summary

Access to and engagement with nature within education will be vital to tackling and adapting to the biodiversity and nature crisis, as well as promoting health and wellbeing and the success of children and young people. The Government has recognised the importance of nature within education, including in the Environmental Improvement Plan and the Department for Education's Climate Change and Sustainability Strategy.

However, the current plans do not go far enough to guarantee that every child in England has the level of access, contact and quality of connection with nature required to achieve the vision of the EIP and the DfE's strategy.

In this policy paper, we set out the gaps in the Government's current approach and make the case for a statutory requirement for nature within all education settings in England to provide access to and regular high-quality engagement with nature; ensuring all children have equal opportunity to benefit from connecting and engaging experientially with nature.

Nature in education: preparing the next generation

Nature and wildlife are under threat. The United Kingdom faces a dual climate and ecological crisis, the effects of which will be most keenly felt by the next generation.

Preparing children to **mitigate** and **adapt** to the impacts on their changing world must be a fundamental responsibility of our education system, in addition to harnessing the immense potential of a future workforce that will prove critical for a new, greener economy.

Currently, too few children enjoy and benefit from being close to high-quality natural spaces in their daily lives, and their mental health, wellbeing and academic performance is suffering as a result. A recent survey of 3000 children, conducted by Save the Children, showed that 70% of children are worried about the world they will inherit, with 75% calling on the Government to take stronger action on their behalf. 60% felt that climate change and inequality are affecting their generation's mental health in the UK, and more than half (56%) believe it is also causing a deterioration in child mental health globally.

Biodiversity and nature loss and climate change are global, societal issues that have significant consequences for everyone, especially children and young people. Aligned with fundamental British values (democracy, rule of law, individual liberty, mutual respect and tolerance of those with different faiths and beliefs),¹ these critically important topics should be threaded through and across school life to instil a sense of knowledge, agency, and environmental guardianship in every child.

The Department for Education's (DfE) <u>Sustainability and Climate Change Strategy</u> sets out the vision for education's role in fighting climate change, and "creating a better, greener world for future generations." Specifically, the strategy acknowledges the need for improving the knowledge and understanding of children and young people, including in response to recommendations from the Committee for Climate Change, the Dasgupta Review and the Green Jobs Taskforce report.

There is also a clear commitment to connecting children and nature in the Environmental Improvement Plan (EIP), alongside key enablers such as improving access to nature, protecting our landscapes and heritage, and connecting with nature as a way of improving health and wellbeing. This cross-Government document recognises that access to green space for children is associated with improved health and wellbeing, improved behaviour, cognitive development and can be associated with higher standardised test scores.

¹ All schools have responsibilities to promote basic British values: https://www.gov.uk/government/publications/promoting-fundamental-british-values-through-smsc

As part of the EIP, the DfE has committed to:

- Ensure learning in and about nature happens at every level of education; for example, by supporting teaching on climate change via the curriculum and by putting in place a new occupational standard for further education teachers to build sustainability into their teaching by 2023.
- Encourage education providers to think of school land as one whole 'National Education Nature Park'. This will give children and young people the opportunity to take action to improve their environment including through increasing its biodiversity, learning about their surroundings, and enhancing key numeracy and data science skills.
- Develop the Climate Action Award pilot, with a view to national roll out in 2023 to 2024. This will recognise the achievements of children and young people in taking action to increase biodiversity and develop their skills and knowledge of climate change.
- Deliver a new Natural History GCSE by 2025.

These commitments are the first of their kind, and demonstrate the value and importance of nature, climate, and sustainability within education.

However, the current plans do not go far enough to guarantee that every child in England has the level of access, contact, and quality of connection with nature required to achieve the vision of the EIP and the DfE's strategy.

The school estate, communities and local environments differ extensively across England. This means that the ways children access nature also varies.

Proximity to nature does not equate with access to it, many children in rural communities are as disconnected from the natural world as those living in urban areas. Socio-economic barriers, localised anti-social behaviour, and a range of complex cultural barriers all contribute to critical accessibility challenges for children across England when accessing nature.

The National Education Nature Park goes some way to address these differences through engaging schools as a space for children to experience nature and increase the biodiversity of school grounds. However, as a non-mandated initiative, it is a certainty that not every school in England can or will engage. Space available within schools for the implementation of the Nature Park varies significantly, further highlighting the inequalities that exist within the school estate relating to nature-based education and learning.



Nature, climate, and sustainability feature within the curriculum but are routinely confined to the sciences as subject matter.

To achieve the level of comprehension required to achieve the DfE's vision of a "better, greener world for future generations", children must understand the theoretical applications of ecology, conservation, climate, and sustainability *alongside* experiential learning; spending regular time in nature, experiencing wildlife first-hand, exploring different habitats, landscapes and ecosystems and the interdependencies that exist between nature and humans.

Policy approach to increase the equity and impact of the DfE's climate change and sustainability strategy

All children should have an equitable opportunity through education to experience and learn about nature and how to protect it. This would act as a key enabler to equipping children with the foundational knowledge and understanding required to understand both the value nature brings to their lives, and to inspire them as environmental leaders and guardians.

We are calling for a statutory requirement for all education settings in England to provide access to and regular engagement with nature for children.

The current system of sporadic, time-limited projects with short-term funding is failing to meet the immediate need for a UK-wide, systemic shift in how children and young people are prepared to face the dual ecological and climate emergencies. Despite multiple welcome Government initiatives and work across the education sector, these voluntary approaches will only create inequitable opportunities for children across the country to experience, learn, and explore nature. A statutory requirement, bolstered by support for teachers and educators, education settings, and outdoor learning, will genuinely ensure that all children have equal opportunity to nature within education.

A statutory requirement must be enacted and supported by:

1. Make the school estate the equitable space for connecting to nature.

Building on the ambition of the National Education Nature Park, *every* educational establishment should be the place where children can access nature and wildlife every day, regardless of where they live (urban or rural) or their economic circumstances.

School grounds should provide safe, high-quality spaces for children to learn and play in nature, alongside providing essential havens and safe spaces for wildlife to thrive. Using the evidence of the Children and Nature programme, school grounds improvements that are small in scale, easily maintained, and designed to be sustainable have the greatest impact and chance of longevity regardless of staff turnover/engagement. This accounts for the significant variety of school ground types across the school estate, from larger pockets of land and playing fields, to concrete playgrounds in older Victorian settings.

Equitable access includes ensuring schools know how to access and resource the materials, kit, and equipment required to enable learning outdoors, such as wellington boots and waterproofs. This is especially important in underserved communities, to encourage and support parents and guardians to allow their children to participate with their peers.

Time spent learning in outdoor spaces should not be restricted to nature-based activities alone. Lessons across all subjects should include time spent learning outdoors, not just for the proven benefits to aiding learning and retention, but to support the inclusion of nature, climate, and sustainability across the curriculum.

2. Prepare all teachers to embed nature, climate, and sustainability across the curriculum, and to connect children with nature.

Nature, climate, and sustainability should not be restricted to science and geography. Teachers are increasingly being confronted with complex conversations with students that have big implications. Students say they are interested in learning about nature's decline and climate change, but many already have misconceptions about how it works. Children and young people are accessing information on social media channels and need critical steer on determining what is true and what is false.

Yet, research shows that 70% of UK teachers have not received adequate training to educate students on biodiversity loss and climate change, its implications for the environment and

societies around the world, and how these implications can be addressed. The proposed new model primary science curriculum, as committed to within the DfE strategy for sustainability and climate change, simply does not go far enough. Conversations, questions and challenges about nature's decline and climate change could arise in any lesson within the school day, and all teachers must be equipped with a minimum standard of knowledge and capability to support children in their exploration of the subject, at each stage of learning. The importance of protecting nature and biodiversity, and the links with climate change and its mitigation should be made explicit.

Further evidence:

Equality of access to natural spaces:

Natural spaces have a wide definition. It can mean green spaces like parks, woodland or forests and blue spaces like rivers, wetlands, beaches or canals. It also includes trees on an urban street, private gardens, verges, ponds and even indoor plants, window or bird/bat/hedgehog boxes.

Quality counts. Evidence shows us that the quality of the space and of the relationship with nature is part of the reason for its positive impact on wellbeing. Researchers use the term "connectedness" to describe the ideal relationship with nature.

This matters when exploring how children access green and blue spaces, and the equity of nature connection. While public green spaces exist in many communities, the accessibility, safety and biodiversity of these spaces differ significantly.

COVID-19 highlighted on a national scale how critical access to nature is. The <u>2022 People and Nature survey</u> demonstrated that nearly half of adults in England reported spending more time outdoors than before the pandemic (45%, March 2022). Close to four in ten said that nature and wildlife are more important than ever to their wellbeing (39%, March 2022).

The <u>Children's People and Nature survey from 2021</u> highlighted that children's access to nature during coronavirus varied across the population. 71% of children from ethnic minority backgrounds reported spending less time outside since coronavirus, compared with 57% of white children. Three-quarters (73%) of children from households with annual income below

£17,000 spent less time outdoors, compared with 57% from households with an annual income above £17,000.

A <u>report by Wildlife and Countryside Link from 2023</u> revealed that in more than 1 in 10 neighbourhoods, less than 10% of people living there will be able to access nature within a 15 minute walk. Out of 300 local authorities, less than 10% of these have a population of 90% or more who can access nature within 15 minutes.

The report findings demonstrate that this a problem at scale. Around 1 in 3 (7.8 million) English households don't have nature near home. And in large areas of the country the majority of the population don't have nature nearby.

Access to nature is a rural and urban problem: Both rural and urban communities are among those with the least access to nature, with rural and semi-rural areas featuring prominently in the rankings for the 10 most nature access-poor local authorities. While urban nature spaces are often smaller and in poorer condition, rural communities face significant challenges in accessibility, particularly for those reliant on traveling by foot or public transport.

This inequality of access to nature acutely impacts children as well as adults.

Making schools the equitable space *for* nature could be the key driver for levelling up children's access *to* nature. Initiatives such as the National Education Nature Park demonstrates the intent of the DfE to bring children closer to nature as part of the school day, but it does not go far enough to ensure parity across the school estate. These schemes are "opt-in" and lack the sustainable exit strategies that will ensure a school embeds outdoor learning and nature connection as a statutory element of school life once the programme has come to an end.

In the context of this policy paper, access to nature within the place of education (state-funded nursery, primary, secondary and special schools, non-maintained special schools, pupil referral units, general hospital schools and independent schools) should fall within four areas of school life:

- 1. The curriculum; how nature, climate and sustainability are threaded across and through all subjects.
- 2. Time spent in nature within the school day i.e., time spent teaching children outdoors using nature as both subject matter and/or using nature as a learning setting.



- 3. The quality of outdoor space in schools i.e., green space that is biodiverse, safe, and that provides room for learning outdoors.
- 4. The preparedness of teachers to both lead and manage learning in outdoor spaces, and support to thread nature, climate and sustainability into their subject specialisms.

Interdependencies between nature and children's learning, health, and wellbeing:

Research robustly demonstrates that mental health initiatives in schools can lead to significant improvements in children's mental health, social and emotional skills, and reductions in classroom misbehaviour, anxiety, depression, and bullying.

Health and wellbeing:

Nature exposure is consistently associated with better health (<u>Mygind et al., 2019, Twohig-Bennett and Jones, 2018</u>). At least 30 minutes in a natural environment is associated with lower depression and blood pressure, and increased frequency of nature exposure is associated with greater social cohesion and physical activity (<u>Shanahan et al., 2016</u>). Improvements in self-esteem and mood have also been observed after just five minutes of exercise in a natural environment (<u>Barton & Pretty, 2010</u>).

Focusing on the wellbeing of students has also proven to be beneficial for a school's academic output. This reflects the <u>findings of the Natural Connections Demonstration Project</u> which reported that learning in natural environments had a positive impact on the broad groups of benefit areas identified by <u>Dillon and Dickie (2011)</u>, including pupil health and wellbeing.

Evidence from previous Government initiatives such as the DfE's 'Children and Nature' programme highlighted that spending time in nature had positive impacts on children's behaviour, attendance, and attainment. 94% of participating schools agreed that the programme had a positive impact on children's mental health, wellbeing, and resilience. These benefits translate directly into education settings, and the conditions required for children to thrive as motivated, confident learners. Children with good self-esteem and mood are better able to engage with their peers, teachers, and subject matter.

Contact and connection with nature are both important. Both are needed to <u>optimise</u> outcomes for health and wellbeing, and for pro-environmental outcomes.

The necessity to harness these powerful aids to health and wellbeing in schools has never been so urgent. Research from YoungMinds shows that one in six children aged five to 16

were identified as having a probable mental health problem in July 2021, a significant increase from one in nine in 2017. That's five children in every classroom. The research also highlighted the following statistics:

- The number of A&E attendances by young people aged 18 or under with a recorded diagnosis of a psychiatric condition more than tripled between 2010 and 2018-19.
- 83% of young people with mental health needs agreed that the coronavirus pandemic had made their mental health worse.
- In 2018-19, 24% of 17-year-olds reported having self-harmed in the previous year, and seven per cent reported having self-harmed with suicidal intent at some point in their lives. 16% reported high levels of psychological distress.
- Suicide was the leading cause of death for males and females aged between five to 34 in 2019.
- Nearly half of 17-19 year-olds with a diagnosable mental health disorder has self-harmed or attempted suicide at some point, rising to 52.7% for young women.

These experiences impact people into adulthood, with one third of adult mental health problems being directly connected to adverse childhood experiences. Contact and connection with nature is not a solution for poor mental health and wellbeing, but can be an impactful supporting aid, accessible to every child if available through their school.

Nature around where we live is <u>associated with lower rates of all-cause mortality</u> (outcomes include reduced risk of Type II Diabetes and obesity, and increased likelihood of physical activity). Nature based activities can deliver positive health and wellbeing outcomes, a positive return on investment, and reduce inequalities.

Learning, behaviour and attendance:

Time spent in nature is associated with positive outcomes for children's learning experiences in schools, including improved attainment and engagement with lessons.

Findings from the <u>Natural Connections Demonstration Project</u> demonstrated that 92% of participating schools agreed that spending time in nature helped children to engage with their learning, 85% agreed that it had a positive impact on behaviour, and 95% felt that nature as part of lessons made learning more enjoyable.

Children and young people who regularly connect with natural environments have been found to have higher achievement (in comparison to their peers or projected attainment) in

reading, mathematics, science, and social studies. These children exhibit enhanced progress in physical education and drama, and a greater motivation for studying STEM subjects. Longer term and 'progressive' experiences in nature <u>result in the greatest benefits</u>, and children with below average achievement have tended to make progress in learning outcomes to the greatest degree.

A school-based learning programme taking place in the natural environment was <u>associated</u> <u>with improvements in attendance rates and improved behaviour</u> amongst children at a special needs school, sustained over two months, following learning in the natural environment.

Learning in natural environments may be of <u>particular benefit to specific groups</u> such as children suffering mental distress, those with low self- perceived social and personal skills, and those with other additional needs.

Future skills, green economy and meeting the Gatsby Benchmarks for school careers guidance:

Action Area 2 of the DfE Sustainability and Climate Change Strategy outlines that it is critical that young people and adults have the green skills that will allow them to build careers and participate as Britain leads the world into the Green Industrial Revolution and strives for natures recovery.

To ensure young people take part in apprenticeships and T levels linked to green skills, this access to the understanding of the natural world is paramount. Careers guidance meeting the Gatsby Benchmarks ensures equity in access to knowledge and diversity of careers, The insights report Future Skills Questionnaire (FSQ) | The Careers and Enterprise Company published by the CEC highlighted that Differences occur in the career readiness of certain groups of students depending on background and characteristics. Reducing equity through access to and engagement with natural spaces supports schools to diversify their careers offer, strategically put in place engagement with a wider range of employers and support the equity of access to a range of skills and careers for the future.

The benefits that have been outlined above for accessing to nature are consistent with <u>those</u> <u>needed to achieve a transition over to green skills</u> - working collaboratively, coalition building, problem solving, engineering and science skills. Building confidence and knowledge of the natural world by ensuring access to and engagement with it for every student in England will ensure the next generation has the understanding and attitude needed to succeed in green skills. Lack of diversity in the workforce has been highlighted as an issue needing addressing

for the green industrial revolution and if schools are to play a long-term role in teaching green skills, and in informing and encouraging young people to enter careers that contribute to the net zero transition equitable access to, and engagement with nature must be a statutory right for every young person.

Wildlife and Countryside Link (Link) is the largest nature coalition in England, bringing together 82 organisations to use their joint voice for the protection of the natural world and animals. Wildlife and Countryside Link is a registered charity number 1107460 and a company limited by guarantee registered in England and Wales number 3889519.

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The following organisations have inputted into and support this briefing:

Amphibian and Reptile Conservation
Born Free Foundation
Chester Zoo
Institute for Fisheries Management
John Muir Trust
Plantlife
RSPB
Seal Research Trust
The Wildlife Trusts
Wildfowl and Wetlands Trust
Zoological Society of London



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