

The National Education Nature Park

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The National Education Nature Park offers a way to embed sustainability and design into D&T. Using school grounds as a live design context, the programme enables pupils to investigate, design and improve their environment.

As a former secondary D&T teacher, I've always believed that the most powerful learning happens when learners can interact with and haptically explore and evaluate the impact of their ideas. I am now a Regional Officer working on the National Education Nature Park; a free programme, commissioned by the Department for Education and developed and delivered by a partnership led by the Natural History Museum, working with the Royal Horticultural Society and additional partners. The Nature Park programme empowers young people to understand and care for the natural world through making their school site a better place for everyone's wellbeing and environment.

The programme offers an opportunity for D&T teachers to explore environmental and climate-relevant design education across the curriculum. We're at the beginning of ensuring the programme aligns with the D&T curriculum, and we're just getting started with co-creating resources with the D&T community. As we embark on that journey, I want to share with you some of the ways that the programme can already support D&T learning.

Through a five-step cycle supported by curriculum-linked resources and activities, the Nature Park invites young people to use their school grounds as a place for research, development and testing. One of the aims of the programme is for young people to develop nature-rich spaces in previously concrete and nature-depleted areas of their schools. We offer guidance on creating new habitats such as ponds, living walls and wildflower meadows or microhabitats such as bird boxes or insect hotels.



By grounding design challenges in living educational environments, projects through the Nature Park can help learners develop design competence, ecological literacy, and agency. The programme invites young people to engage in collective action through observing, planning, communicating, improving, monitoring nature and enhancing climate resilience.

Designing with the environment

The Nature Park programme offers the opportunity to use school grounds as a 'design context' for learners' projects, offering an alternative to hypothetical clients. Spotlighting the grounds in this way enables learners to use Nature Park surveys and tools to conduct primary research that explores the needs of the stakeholders; the plants, wildlife and people who inhabit the grounds.

Our habitat mapping tool sees learners create a map of their site, which they can use as their starting point to 'get to know' the materials and nature found on site. This then helps learners to make decisions about how best to develop areas of their site for the needs of stakeholders. Learners can then prototype, test, record data and evaluate their designs over time with the Nature Park digital tools and resources that are free to use on our website.



These suggestions could be developed to support the key D&T aims of identifying users' needs, applying technical knowledge, selecting sustainable materials, testing performance, and refining designs through iteration.

Textiles

The Nature Park encourages learners to explore natural materials, patterns, textures and processes found within their school grounds. Through activities such as texture mapping, colour collecting and an exploration of plants and their properties, learners can investigate how plants and natural fibres influence fabric production, surface design and structure. The opportunity for learners to have this hands-on, on-site exploration could help develop design inspiration, material knowledge, and practical making skills. Nature-inspired design contexts also introduce learners to biomimicry and sustainable textile practices, helping them understand the environmental impact of materials while creating aesthetic products rooted in real-world contexts.

EXAMPLES

-  Using 3D model making to get to know your outdoor space at school. An opportunity to develop making skills and explore scale.
-  Using Nature Park mapping tools to analyse site conditions and plan improvements that enhance biodiversity. For example, designing, building and placing relevant bird boxes, bird feeders or pollinator planters based on evidence.
-  Surveying for water permeability and research watering needs to help inform the design of a rainwater catchment system or sensor-based irrigation.
-  Investigating environmental quality of your outdoor spaces to inform impactful designs, for example solar-powered lighting for outdoor spaces or modular seating or shelters that support outdoor learning and withstand the elements.
-  Using the 'Points of View' activity to connect to the needs and wants of the user, which in this context, is the wildlife itself.
-  Using the 'Extreme Weather' shelter activity to explore how iterative design can help you create a model shelter that will survive different weather conditions.

EXAMPLES

-  Use creative responses to a place to get to know your space with texture rubbings, writing poetry and life drawing of found patterns and shapes.
-  Use photography in the Hidden Nature Challenge to find a repeating pattern in nature or a plant in an unexpected place for inspiration.
-  Use texture mapping to discover textures in nature and link them to orienteering and mapping to stimulate discussion around where different plants like to grow at school. This can also link to traditional processes of making fabrics from textured plants and fibres.
-  Use colour collecting to discover colours in nature and help to create a colour palette linked to the nature found at school.
-  Use 'plants and their jobs', 'plant detectives' and 'design a plant' to explore the role of plants in our world and how their properties lend themselves to become different fibres, fabrics and materials.