

Rooted in Place: Cultivating Interdisciplinary Learning Through a
Campus Dye Garden

University of Portsmouth - Teach Well - Academic Innovation in Practice
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**Wildlife populations have
declined by 73% on average in
between 1970-2020 (WWF, 2024)**





Biodiversity loss in the UK

“It has become commonplace to refer to the modern biodiversity crisis as the ‘sixth mass extinction’ (Hull, Darroch, & Erwin, 2015).

UK species decreasing in number and abundance (Hayhow et al., 2019).

The UK is one of the world's most nature-depleted countries - in the bottom 10% globally (National History Museum, 2021).

UK has an average of about half its biodiversity left, far below the global average of 75% (National History Museum, 2021).



The youth disconnection gap



- Young people aged 18–25 report declining nature connection compared to older cohorts (Straka et al., 2025).
- Engagement with nature decreases from childhood and is at an all-time low in mid-teens, before picking up in the mid-twenties (Hughes, Rogerson, Barton, & Bragg, 2019).
- Those that are engaged with the natural world are much more likely to want to protect it (Soga & Gaston, 2016; Zylstra, Knight, Esler, & Le Grange, 2014).
- People with a closer relationship with nature are prepared to do more for the environment or nature. Evidence from 75 studies has shown a causal link between nature connection and pro-environmental behaviours (Mackay & Schmitt, 2019).

Benefits of nature connection



Improving mental health and wellbeing
(Capaldi et al., 2015; Cleary et al., 2017;
Martin et al. 2020).



Reducing stress and anxiety in young people
(McEwan et al., 2021)



Enhancing physical health (Kardan et al., 2015;
Wheeler et al., 2015)



Improving memory (Berman, Jonides, Kaplan, 2008)
Increasing focus (Bratman, Hamilton, & Daily, 2012)



Improving academic performance (Hodson &
Sander, 2017; Matsuoka, 2010; Wu et al., 2014)





**Nature doesn't have a marketing
department**

Industrial Colour Systems & Environmental Impact

20 percent of freshwater pollution worldwide is attributed to the dyeing and treatment of garments, and an estimated 625,000 tons of chemicals are dumped into our water from the textile industry, **much of which is heavy metals and colourants from the dying process** (Burgess, 2019).



Before Synthetic

For most of human history, textile colour came from plants, soil, and animals, with dyed yarn fragments dating back up to 36,000 years.



Student work: Aisha Waffic

Student project



- After conducting research with the Hampshire and Isle of Wight Wildlife Trust, Marketing Students submitted business proposals to Estates for wildlife-friendly dye gardens to be installed on campus
- Winning proposals were awarded £1050 funding to install the student proposals, students helped source the materials
- All students on the module then planted the gardens and created marketing campaigns about what they were doing to encourage other young people to take action
- Fashion Design students then use the dye gardens to create natural dyes for textile design



Interdisciplinary collaboration



Place-based learning

Place-based, experiential projects bridge the gap between curriculum and professional readiness.

Engaging with live briefs, real decision-makers, and tangible environmental outcomes equips students with the confidence and critical awareness to challenge prevailing practices and drive sustainable change when they enter industry.



Student work: Hannah Hatchard



Campus nature connection



Campus nature connection, when purposefully embedded, grounds concepts like sustainability in lived, sensory experience while creating a lasting legacy for future cohorts and enhancing campus biodiversity.



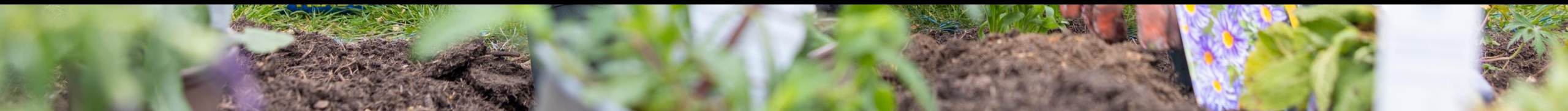
“I find myself caring a lot more about nature... I find myself caring a lot more about the environment. When you see the beauty of it and the positive experiences you can have in it, you realise you don’t want to lose those experiences in the future.”

“It makes you so much more aware of the impact you can have”

– Student feedback at end of the project



Embedding nature into the curriculum





Q&A

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TikTok – changing social norms

