

# Cultivating Children's Ecological Wellbeing: Introducing the Edible Landscape Project

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Modern psychological practice demands we advocate daily for rights-based and holistic models of health (Mental Health Commission, 2023). The best models emphasise a healthy ecological environment where community spirit positively impacts mental health and collective wellbeing for its members (e.g., World Health Organisation, 2021). Psychologists are eager to draw on these principles to promote psychological health and wellbeing, and when we discover these principles embedded in local initiatives we are keen to showcase the practices, highlight their ingenuity, and promote their success.

Recently, we discovered one such novel education and climate entrepreneurship initiative, The Edible Landscape Project (ELP, see <https://www.ediblelandscapeproject.ie/>). The project presents a method to build community resilience against the negative impacts of climate change and biodiversity loss affecting food systems. Based in Westport, County Mayo, the ELP promotes the creation of edible landscapes or food forests throughout the island of Ireland. Registered as a charity in 2023, the organisation is established and operates as a social enterprise. Recently, shortlisted for the Social Entrepreneurs Ireland Impact Programme 2024, they were also announced as this year's winner of a Trinity College community climate action collaboration, highlighting their community-led multigenerational learning for tackling the climate issues we all face.

## Edible Landscape Project: Bringing “food forests” to schools

A first of its kind, the project inspires all kinds of communities to embed sustainable practices by creating edible gardens in their schools, communities and businesses.



(Photos and branding courtesy of ELP, consenting parents and children)

Successfully introduced to primary schools in the west of Ireland, ELP implementation require creating a food forest on the grounds or in the garden of a school. A food forest is a mini ecosystem providing students with a simple roadmap for developing and understanding interconnected ecosystems. Termed “Seed”, “Sapling”, “Fruit Tree”, or “Food Forest”, depending on the plants that make up the edible landscape, the 2x2m implementations are planted by the students, and aided by a school's ELP coordinator.

Designed by Caithriona Mc Carthy, a lecturer in sustainable horticulture and entrepreneurship at Mayo College of Further Education, lessons encourage an understanding of ecology using a systems-thinking approach. Caithriona first introduced the concept as an MSc thesis when studying organic farming at Scotland Rural College in the UK and then as a climate entrepreneurship postgraduate student at Trinity College Dublin. Working together with primary school teachers, parents, horticulturalists, community activists and sustainability experts, the key premise is that an edible garden mimics a healthy interconnected world to be respected by its human inhabitants.

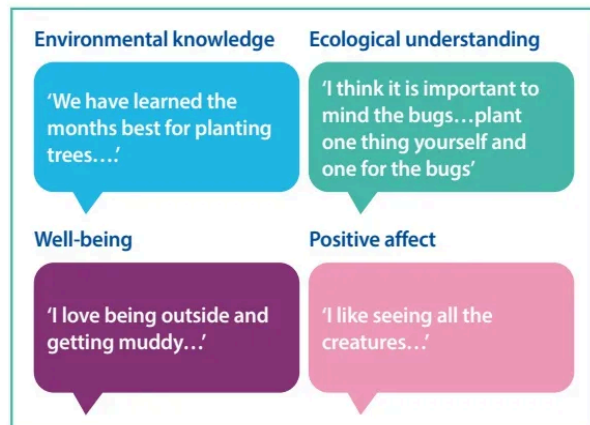
A typical fruit tree food forest consists of an apple tree sapling at the centre, surrounded by a collection of edible herbs, fruit and vegetable plants (e.g., red and white currants, thornless gooseberries, strawberries, lavender, rosemary, thyme, lemon balm). The children collaborate to plant their food forest, naming each plant and hypothetical insect or small animal that may come to inhabit it. From the get-go, the children engage in a micro-lesson to discover the basics of ecology – the study of plants and animals, their relationship with each other and their environment.

## Embedding systems thinking into the curriculum: “The soil is alive!”

Encouraging the embedding of food forests into the curriculum, the ELP has co-developed a toolkit with primary school teacher Michelle Granaghan to enhance geography, mathematics, history, and Irish language lessons. Borrowing from the principles of constructive alignment, each of the strand units have learning outcomes and activities mapped to the curriculum's requirements (e.g., Loughlin et al., 2021). Lesson plans for five themes with up to three activities clearly outline the structure of each lesson but are not overly specific. Teachers may use the resources as a creative pedagogical space to adapt as necessary for their own students' age or stage of learning. In one example, the children co-create and design their food forest using mathematical principles to help the ELP coordinator; measure the terrain using metre sticks and compasses; co-evaluate the health of soil and its creepy-crawly inhabitants using weighing scales, magnifying glasses or microscopes; map their new landscape as *Gaeilge*; ponder the peril of staple crops and the Irish famine; taste the produce with an understanding of its nutrients; and explore symbiotic relationships with envisioning activities about what might be if bees or lady bugs decide to go it alone.

Consistent with a growing education literature (e.g., Liefänder et al., 2012; Otto & Pensini, 2017), feedback from primary-age children, their parents, and teachers corroborate the project's bolstering of learning and responsible environmental behaviour. For example, reviews examining if Forest School (FS) education positively impacts wellbeing via nature-based education and play discuss how children's confidence, relatedness, problem solving and happiness may be improved (e.g., O'Brien, 2009). That said, the FS approach differs from a food forest, as FS is an established pedagogical model and embedded curricular component, whereas food forests are tools for augmenting children's education and wellbeing specific to food systems. Additional research examining the outcomes such as those in Box 1 will therefore be important to reliably reveal forest school or food forest wellbeing

**Figure 1:** Feedback received from primary school children by the Edible Landscape Project



outcomes across a spectrum of pedagogical frameworks and educational contexts (e.g., Egan et al., 2022).

### Box 1: Superordinate themes and subthemes

### Possible learning outcomes

- Knowledge acquisition and systems thinking ability for subjects across the primary school curriculum including mathematics, geography, nature studies, history, and Irish language.
- Environmental knowledge.
- Knowledge of growing using regenerative practices.
- Multi-generational knowledge capacity.

### Possible wellbeing outcomes

- Experience and understanding of connectedness.
- Community resilience and a sense of shared equity.
- Confidence in learning.
- Feelings of happiness.
- Low climate anxiety.

ELP's tailored, educational programmes are founded on systems-thinking for primary school groups, and the initiative is fast evolving from a regional to national movement. Videos illustrating the programme are available on the website and Figure 2 shares a drawing from a student engaging in an Irish language activity to describe their school's established edible landscape.

*"The Edible landscape Project: What a wonderful idea and progressive initiative! The PSI recognises the urgent need for action on climate change to safeguard the health, wellbeing, and future of our planet and its inhabitants. We recognise that climate change is not only an environmental issue but also a psychological and social issue that requires collective action and behavioural change. A project like this with its evidence-based strategies to promote climate change awareness, engagement, and action at the individual and community level, certainly wins our seal of approval!"*

*Dr Odhrán Mc Carthy, PSI President*

**Figure 2:** Apple tree food forest (drawing courtesy of ELP, consenting parents and children)



## Alleviating climate anxiety in children using ELP

Teaching children about their interconnectedness with nature, especially when it comes to food systems, is important in promoting an improved response to the climate crisis and prospective wellbeing. Research increasingly shows that children's awareness of climate change and ongoing environmental degradation, both locally and globally, affects their mental health (e.g., Cowley-Cunningham et al., 2023; Crandon et al., 2022). Sometimes termed climate anxiety, children's perception of the climate crisis facilitates feelings of dread connected to the climate. Children may experience climate anxiety for themselves or their own family (egoistic), for future generations (social-altruistic), and for the environment and animals (biospheric) (e.g., Helm et al., 2018).

The UN Convention on the Rights of the Child (UNCRC Art. 24) asserts the right of the child to the highest attainable standard of health, and advocates for allocating resources affording solutions to accommodate children's climate anxiety concerns. ELP's collaboration with schools presents an especially authentic way to enable children's participatory capacity to moderate it. Some children in a class might be concerned or anxious, but these positive and solutions-based activities foster a deeper understanding of sustainability and agriculture, and can help alleviate climate anxiety through education, engagement, and empowerment. Co-creation, defined as developing something new together with other people, often involves working with children and young people to make the participation experience more acceptable and contextually appropriate (Kazmierczak-Murray et al., 2024). Within co-creation, co-design involves children and young people in the design process (Fraser-Barbour, 2023). Co-design, especially when utilising action-based participatory method can bring out children's strengths, resilience, and optimism. It empowers them, enhances their creative skills, and builds their sense of self, identity, and self-esteem (Nathan et al., 2023).

*"The Edible Landscape Project is an ambitious and forward-thinking education initiative that educates about climate through "doing". It has demonstrated proof of concept, and the next challenge is for the project to maximise its impact by scaling quickly – ensuring that schools and communities from across Ireland can get involved."*

*Colm O’Gorman, Professor of Entrepreneurship DCU*



The 2030 Agenda for Sustainable Development, embraced by every UN Member State in 2015, pledges to eradicate all forms of poverty, diminish inequalities both within and among nations, and combat climate change by the year 2030. This agenda comprises 17 Sustainable Development Goals (SDGs), encompassing 169 specific targets and 232 indicators (UN, 2015). The ELP project is linked to the following 8 SDGs:



## Call to action for PSI members

ELP is calling on the PSI membership to assist the project in several ways. If you can advise on how to grow their national footprint or offer research expertise towards the development of research programmes in partnership with universities, the project would be delighted to hear from you. ELP is currently collaborating with Trinity College Dublin and Westport Tidy Towns on the LEVERS Project, building food forests with community groups nationally. LEVERS is a Horizon Europe funded project that offers opportunities for learners of all ages to take collaborative action on climate issues affecting their own lives and localities. Educational psychologists who have an interest in action and nature-based learning are particularly encouraged to express their interest. For more information contact [info@ediblelandscape.ie](mailto:info@ediblelandscape.ie).

## Conclusion

In wellbeing terms, this ecological activity brings to bear more than a medical lens. It amplifies wellbeing in its ecological context (e.g., Bronfenbrenner, 1979; Michaels et al., 2022; Wold & Mittelmark, 2018). Successfully recruiting schools to participate in this climate education programme, ELP has planted over 25 food forests and engaged over 2000 students. Moreover, the team has now engaged 60 community groups, through a series of edible planting workshops. Focusing on public spaces, communities learn how to grow and consume food in a climate smart way. It's early days, but their ambition is to roll out the project to all 3300 primary and 700 secondary schools across the country. By involving children in such projects, we can support their healthy development and promote sustainable practices and address global challenges.

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