GREEN NEXUS EDUCATION

Growing a Cycle of Sustainability

An Early Years Composting Project

Project period: March 2025 – ongoing

A practical, child-led approach to exploring food waste, soil, worms, plant growth and the natural cycle.



Children exploring food peelings and other suitable organic materials for the compost bin.

Sustainable leadership in early years: turning everyday routines into meaningful environmental learning.

1. Project Overview

Since March 2025, in my role as Sustainable Leader within an early years setting, I have planned, introduced and continued to develop a hands-on composting project designed to make sustainability part of children's everyday experience.

The project began with the introduction of a rotating compost bin and a simple, practical routine: children help collect suitable organic leftovers and garden materials, add them to the bin, and take turns spinning it. Materials have included fruit and vegetable peelings, suitable leftover snack scraps, dry grass and other appropriate natural materials. Scrap paper is included only where it is suitable for composting, such as plain, uncoated paper in small amounts.

Rather than presenting composting as a one-off activity, the aim has been to establish a living system that children can revisit every day. The compost bin has become a familiar part of the setting, giving children repeated opportunities to notice change, ask questions and take part in caring for their environment.



Children take part in adding suitable food scraps to the composting process.

2. From Snack Time to Soil: How the Project Works

The composting routine connects an everyday experience—eating a snack—with a natural process that children can observe over time. Instead of treating all leftovers as rubbish, children are supported to recognise that some organic materials can break down and become part of a useful growing resource.

With adult guidance, children help prepare suitable peelings, place compostable materials into the rotating bin and spin it. They can revisit the bin to notice changes in the materials and talk about what may be happening inside. This repeated involvement helps make the process understandable and gives children a meaningful role in caring for the setting.

Our ongoing routine

- Collect suitable fruit and vegetable peelings and other appropriate organic materials.
- Invite children to help add the materials to the compost bin with close adult supervision.
- Take turns rotating the bin and observing changes over time.
- Look for signs of garden life, including worms in the surrounding soil, particularly after rainy weather.
- Use mature, ready compost to support planting and growing activities.



Children participate in loading the compost bin as part of a practical, shared task.

3. Children’s Voice: ‘Smelly Fruiteater’ and ‘Spinny’

One of the most engaging parts of the project has been the children's own language and imagination. Children have given the compost bin playful names such as **‘Smelly Fruiteater’** and **‘Spinny’**. These names capture the way young learners make sense of unfamiliar processes by connecting them with familiar experiences, humour and movement.

The names also give adults a natural starting point for conversation: What does the bin ‘eat’? Why might it smell? What is happening to the peelings? Why do we spin it? These questions can lead to age-appropriate discussion about decomposition, moisture, air, living organisms and how organic materials change over time.

Children have shown enthusiasm for taking part in the practical steps—for example, helping to cut or prepare peelings with appropriate adult support, adding materials to the container, loading more suitable scraps and taking turns spinning the bin. The hands-on nature of these jobs gives children a visible contribution to a shared project and makes sustainability feel playful, purposeful and accessible.



Children help turn the compost bin, making the process active and memorable.

4. Looking for Worms: Learning Outdoors in All Weathers

The project extends beyond the bin itself. On rainy days, children are encouraged to look carefully around the composting area and nearby soil for worms. This simple outdoor investigation creates opportunities to notice living things, practise gentle observation and ask questions about the role of small organisms in healthy soil.

With adult guidance, these moments can lead to conversations about how worms and other decomposers help break down organic matter and contribute to soil health. Children are encouraged to observe living creatures respectfully and return them carefully to their habitat.

The changing weather adds another dimension to the learning. Rain becomes a prompt for curiosity: Why might worms be easier to spot? What do living things need? How does the soil feel when it is wet? These observations help children connect the composting project with wider outdoor learning and the living environment.



The composting area offers an ongoing opportunity to explore natural materials and garden life.

5. Closing the Natural Loop: From Compost to Sunflowers

When the compost was ready to use, it became part of the next stage of the project: planting sunflower seeds. Children were able to see a practical connection between the materials they had helped collect and the soil used to support new plant growth.

This created a meaningful example of a natural cycle: suitable food and plant scraps break down; the resulting mature compost can help enrich growing media; seeds are planted and, with suitable light, water and care, grow into plants. The plants can then produce new leaves, flowers and seeds, continuing the cycle of life.

For early learners, this is a powerful way to explore the idea that nature does not always work in a straight line from ‘use’ to ‘waste’. Materials can change and become useful again. The sunflower planting activity helped make this connection visible and gave children a reason to revisit and care for the results of their work.

Important learning message: compost is used only when it is mature and suitable for planting; it is not the same as fresh food waste. Adult supervision and appropriate hygiene routines remain part of the process.

6. Learning Outcomes for Early Learners

Understanding natural cycles: Children begin to recognise that organic materials can break down and become part of the soil-growing process, linking food scraps, compost, plants and seeds.

Early science and observation: Repeated visits encourage children to notice changes in materials, ask questions, compare wet and dry conditions, and observe worms and other garden life.

Environmental awareness: Children develop an early understanding that some leftovers can be used differently from general rubbish and that resources can have a further purpose.

Responsibility and belonging: Helping with a shared routine supports a sense of contribution, care for the setting and ownership of a real-life project.

Language and communication: Names such as ‘Smelly Fruiteater’ and ‘Spinny’ create opportunities to describe, explain, predict and ask questions using children's own words.

Physical development and coordination: Age-appropriate participation in preparing peelings, placing materials and turning the bin supports purposeful movement and coordination, with adult supervision.

Curiosity and wellbeing: Outdoor investigation and seasonal observation invite children to connect with nature through play, discovery and shared enjoyment.

7. Evidence of Engagement and Everyday Impact

The photographs document children taking part in the composting routine: handling suitable peelings, adding organic material to the bin, helping to close or turn it, and working alongside peers and adults. These images provide visual evidence of the practical, participatory nature of the project.

The children's playful names for the bin, their eagerness to add more materials and their enjoyment of turning it provide meaningful examples of engagement reported through the project. The routine is embedded in everyday practice rather than being limited to a special themed day. This repetition gives children opportunities to revisit the same process, build familiarity and gradually develop their understanding.

The use of the finished compost for sunflower planting is a further tangible outcome: children could see the compost become part of another activity rather than remain an abstract idea. The continuing search for worms on rainy days keeps the project open-ended and allows new questions to emerge naturally.

Building on this strong everyday engagement, the next stage of the project will extend the activity through children?s observations, questions and shared discoveries. Planned follow-up ideas include recording children?s comments about changes in the compost, drawing the journey from food scraps to sunflowers, comparing the materials before and after composting, and keeping a simple seasonal record of worms and other garden life. These activities will help children revisit their ideas, communicate what they notice and deepen their understanding of the natural cycle over time.

8. Summary: Small Daily Actions, Meaningful Learning

Since March 2025, the composting project has helped turn an everyday early years routine into an ongoing opportunity for environmental learning. Children help collect suitable scraps, prepare and add materials, spin the bin, observe changes, look for worms and use mature compost to support sunflower planting.

The project combines early science, outdoor learning, language, physical participation and environmental responsibility. Most importantly, it makes sustainability visible and enjoyable: children are not simply told that natural resources matter—they are invited to take part in a process and see how materials can be used again.

As Sustainable Leader, my aim has been to build a practical culture of care where sustainability is woven into everyday experiences. The compost bin has become more than a piece of equipment; it is a shared learning resource that invites curiosity, laughter, responsibility and discovery.

“Small hands, everyday actions, and a living connection to the natural world.”

Green Nexus Education — nurturing knowledge, connection and action for a sustainable future.