

Loose Parts Play:

Creativity, Problem-Solving, and Sustainability in Early Years Education

Rebecca Oberg has worked extensively with early years practitioners, nurseries, and national organisations to promote evidence-informed approaches to learning and development. Drawing on guidance from the Education Endowment Foundation (EEF), the Department for Education (DfE), and the EYFS framework, **Rebecca advocates for play-based, child-led pedagogy that nurtures creativity, communication, and critical thinking.**



"Over the years I've focused on how play rich environments and open-ended materials can help children develop creativity, communication, self-regulation and problem-solving skills. In this blog you'll find out why loose parts matter, how the evidence supports their use, and practical ideas you can take into your early years setting immediately. Whether you're in a nursery, pre-school or working as a childminder, I hope the ideas spark your thinking and help you shape environments where children lead, explore and learn with confidence."

Alignment with evidence-based principles:

Loose parts play is a research-informed approach that aligns closely with evidence-based principles in early years education. It offers a cost-effective way to enhance pedagogical practice by fostering children's independence, creativity, and resilience.

Moreover, it supports the aims of the Sustainability and Climate Change Strategy by promoting resourcefulness, reuse, and environmental responsibility within early years settings.

Loose parts are open-ended, moveable materials such as wooden blocks, fabric scraps, bottle tops, stones, shells, or cardboard tubes, offering children the opportunity to explore, create, and learn in ways that structured toys often cannot.

Evidence from the The Education Endowment Foundation (**EEF**), **DfE**, and **Ofsted** demonstrates that when children are given the freedom to explore and problem-solve in a language-rich environment, they gain the confidence and skills to thrive both academically and socially.

The **EEF** highlights the importance of approaches that develop problem-solving, self-regulation, and communication, all skills naturally fostered through loose parts play.

Through their exploration, manipulation and fascination with loose parts, children learn to make choices, test ideas, and adapt strategies, supporting both independence and critical thinking. ([Play Based Learning](#), **EEF**)

The Early Years Foundation Stage (EYFS) emphasises that **play** is central to children's learning and development and loose parts play fits seamlessly into the EYFS framework, promoting holistic development across multiple domains. As children build with blocks they are developing **fine and gross motor** skills. While negotiating with peers over roles or designs they are building their **social and communication** skills. When children manipulate materials, they engage in **problem-solving** and **mathematical thinking**, experimenting with balance, size, and shape.

One of the key strengths of loose parts is their **versatility** and **accessibility**. Whether you are in a large nursery or a childminding setting, everyday materials, recycled items, natural objects, or household items, can become powerful tools for learning. Their flexibility enables an inclusive approach, accommodating children of different ages, abilities, and interests. Some children will create complex constructions, while others engage more through sensory exploration, **your role is to facilitate learning by observing, reflecting, and supporting this child-led experimentation.**



Research and inspection evidence further reinforce the value of loose parts in early years settings.

A systematic review identified a relationship between play materials similar to loose parts and children's problem-solving, creativity, academic skills (reading and maths), and both convergent and divergent thinking.

Notably, only one study explicitly used the term "loose parts." The review highlighted empirical and methodological gaps regarding the relationship between play materials and cognitive development, suggesting areas for future research. Cankaya, O.

Sustainability is increasingly recognised as a key component of early years practice. According to the DfE's **Sustainability and Climate Change Strategy**, the EYFS framework ensures that from birth to five years, children develop an understanding of the world and the natural environment. This includes learning about **nature**, the causes and impacts of climate change, and the **importance of sustainability**.

Loose parts play aligns perfectly with this agenda: using **recycled, natural, or everyday materials encourages environmentally responsible practices** while also enriching children's learning. Early years settings can support sustainability by creating environments that promote exploration of natural materials and phenomena, helping children understand the value of **reusing, repurposing, and respecting resources**.



For some top tips on how to use loose parts with your children, have a look at our handout



By embracing loose parts, you are cultivating curiosity, collaboration, and lifelong learning skills.

References:

Education Endowment Foundation. Play-based learning.

Retrieved from: <https://educationendowmentfoundation.org.uk/early-years/toolkit/play-based-learning>.

Department for Education. Statutory framework for the early years foundation stage.

Retrieved from: <https://www.gov.uk/government/publications/early-years-foundation-stage-framework>

Cankaya, O. (2025). The Relationship Between Children's Indoor Loose Parts Play and Cognitive Development.

Retrieved from <https://pmc.ncbi.nlm.nih.gov/articles/PMC12112344/>

Further Reading:

<https://www.edutopia.org/article/how-to-make-the-most-of-loose-parts-play-in-preschool>

<https://www.myteachingcupboard.com/blog/free-educators-guide-to-loose-parts-play>.

<https://www.inspiringscotland.org.uk/wp-content/uploads/2017/03/Loose-Parts-Play-web.pdf>

<https://www.bradfordbirthto19.co.uk/early-years/stronger-practice-hub>