

The importance of Loose Parts Play

Our children are our future and in order for our children to grow up to be the next people with the ability to change our world we **MUST** give them opportunities during childhood to be curious, creative, imaginative and inventive? A great way to do this is through loose parts play.

An Introduction to Loose Parts

It was Simon Nicholson, a Landscape Gardener, who came up with the theory of Loose Parts in 1971. He was redesigning a children's playground area and noticed that traditionally, children's play areas were all static and they contained no elements that are liable to vary or change, i.e. variables. He stated that 'in any environment both the key of inventiveness and creativity, and the possibility of discovery, are directly proportional to the number and kind of variables in it.'

This means that if a child can see possibilities within their environment, the amount of creativity and discovery increases massively, and loose parts hold infinite play possibilities. In the 1970's and 1980's children's play areas consisted of swings, slides, climbing frames and roundabouts. Now many modern play areas consist of water play, sand play, pipes for the water to run down, pulleys for the sand, tyres, tunnels and much more giving them opportunities to experiment.

How loose parts can lead to accelerated brain development

Loose Parts encourages children to be curious, creative and imaginative and it is during these times that a hormone called BDNF (Brain Derived Neurotrophic Factor) is released. BDNF acts like a fertiliser to the brain and increases the speed of brain growth. It not only increases the growth of neurons in the brain but grows new ones. The more BDNF that is produced, the healthier the brain neurons are.

If you think of the brain like branches of a tree, if the tree does not get water, sunshine or carbon dioxide from the air, the branches will not grow and will eventually die off. It is the same with children's brains – if they are not given the opportunities to be curious, creative and imaginative then new neurons in the brain will not grow and develop.

Once the brain is fully developed there is no turning back which is why good quality early years education is crucial.

BDNF is NOT produced when children are watching screens.

In addition, loose parts play also helps to develop children's gross and fine motor skills which are essential to be successful in school. Children cannot hold a pencil or write if they don't have enough core strength or enough strength in their wrists, arms or shoulders.

Why is it important?

The evidence of how play can extend and grow a child's brain can be seen in the image below of a CT scan of 2 brains. The brain on the left is from a healthy 3 year old with an average head size whereas the brain on the right is from a child from a Romanian orphanage who suffered from severe sensory deprivation. The right brain is smaller, has enlarged ventricles – holes in the centre of the brain and it also shows a shrunken cortex which is the brain's outer layer.

Researchers have also found that these children go on to have smaller brains in adulthood too. Despite the orphans being adopted into loving, nurturing families in the early 1990s, the early neglect has left its mark on their brain structures.

The following images were shared by Professor Bruce Perry and show how a neglected or abusive childhood can impact on the brain structures. Whilst these images are extreme, it does show how brain growth can be physically affected by early years experiences.



Developmental Delays due to Covid-19 Pandemic

Shockingly, we are still seeing children arriving in Early Years settings, primary schools and even secondary schools with mild to severe developmental delays due to the Covid-19 pandemic lockdowns and the children having had a lack of complex play experiences. Early Years specialists are even being called into secondary schools to deal with some of the developmental delays in some of the children. The main issues are:

- Squints due to not being out and about – their eyesight hasn't developed sufficiently
- Inability to communicate/interact with others
- Speech and language difficulties
- Weak core muscles and poor trunk stability which means they are unable to write

When children play they are running around, bending down, using their arms and hands to climb and they are naturally building up the muscles they need. During the Covid-19 lockdowns this didn't happen and this is the result. Speech and language therapists are inundated with referrals so the waitlist is extremely long.

After recognising these problems, the government put into place and funded until 2024 early years stronger practice hubs around the country which form part of the government's education recovery package. These will provide advice, share good practice, and offer evidence-based professional development for early years practitioners.

As we mentioned before, loose parts encourage children to be creative, imaginative and inventive, which results in the production of BDNF. So, what better way to accelerate children's learning that by offering loose parts on a regular basis?

So what are loose parts?

They offer multiple rather than single outcomes and have no specific set of directions. No single result is inevitable unlike a jigsaw puzzle where the pieces are meant to be fitted together in a specific way to make a single picture. Loose parts can be used in many ways, for example, a scarf can become a blanket to swaddle a baby, a platform for a picnic, a fishing pond, a cover for a den, a veil covering the face of a bride or even a piece of clothing. If you are unsure if something constitutes a loose part, ask yourself whether the material can:

- Be moved

- Be carried
- Be combined
- Be redesigned
- Be lined Up
- Be taken apart and put back together in multiple ways
- Engage children in critical thinking and problem solving
- Foster creativity, imagination and exploration

Here are some examples of loose parts but the list is endless because really, anything can be used as a loose part:

Natural Open Ended Resources	Manufactured Open Ended Resources
Branches, twigs and bark Mud, soil and clay Gravel, pebbles, stones, and rocks Leaves, flowers, moss and seeds / seed pods Pinecones, acorns, walnuts, beechnuts and conkers Shells, driftwood, seaweed Sea urchin quills Dried star fish Feathers Water and sand Dried beans and lentils Dried pasta and rice	Glass nuggets, buttons and beads Bottle tops and jars lids Curtain rings Cushions, blankets and other fabrics Ribbons, wool, string and felt Jewellery and bangles Soft brushes and safety mirrors Hair curlers Boxes of a variety of sizes from little tiny ones for treasure, to big ones that they can put themselves into! Keys Nuts and bolts Chains Tubes and pipes Funnels Guttering Jugs, teapots and cups Cutlery and larger utensils Pans and bowls Tyres (including go kart tyres) Tarpaulin Crates Planks Cable reels of different sizes Toy cars Lego Corks Wooden building bricks Pallets Plastic bottles Empty plant pots Old telephones, computer equipment, tv's

	Springs Paper
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Resources that can assist children to be even more creative with Loose Parts

Loose parts are wonderful but if we add some additional resources, the opportunities open up even more. To enable children to be creative, imaginative and inventive, try adding resources that will enable them to join things together, move them around, stick them into things, and just generally experiment with them such as:

- Cellotape
- String
- Ropes
- Elastic bands
- Boxes
- Children's shopping trolley
- Children's shopping basket
- Toy buggy
- Toy pram
- Paper bags
- Buckets
- Watering can
- Play-doh
- Clay
- Dough
- Salt-dough
- Fabrics

Loose Parts Play for Babies and Young Children

Loose parts can be very small so they do carry a risk of choking for younger children. We therefore need to provide loose parts that are multi-sensory, soft and larger.

Our 5 senses are to see, hear, touch, taste and smell. Loose parts that are multi-sensory are items that involve or use more than one of the senses

Multi sensory experiences help to engage our 5 senses and new connections develop in the brain. The more sensory experiences we have, the greater our ability to create pathways in the brain for thought, learning and creativity. New experiences are also engaging for children.

Examples of loose parts suitable for babies and young children are:

- Empty, cleaned water/milk/juice bottles
- Egg boxes
- Large balls where pieces can't be bitten off
- Silver foil blankets that are used to help prevent hypothermia
- Saucepans
- Wooden spoons
- Metal spoons
- Whisk
- Colander
- Measuring spoons that are joined together
- Large, cleaned pebbles
- Blankets
- Different fabrics such as fur, velvet, silk, satin etc
- Items that are shiny and/or colourful
- Large shells
- Dried starfish
- Bean bags of different sizes and weights
- Cardboard boxes
- Tied together curtain rings
- Brushes
- Comb
- Curtain rings
- Larger pine cones

- Tea strainer
- Sieve
- Fresh fruit such as lemons, oranges, limes
- Fabric pouches containing herbs such as lavender, mint, etc

These items could be put together to create a 'treasure basket' for babies or young children to explore and it often keeps them entertained for much longer than plastic toys that have one purpose. Try adding some pasta or rice to the empty bottles to make your own shakers, or water and biodegradable glitter. Loose parts don't have to cost very much, if anything at all as a lot can be collected when out and about with the children at woods and parks.

If you don't already use loose parts in your setting, why not start gathering some items that you can use to introduce this - or think of other items you can add to what you already have. It is fascinating observing all the differing ways children will use what you provide.

Loose parts play enables you to step back and really observe the children and watch how they are meeting the various areas of learning within the EYFS. The great thing about loose parts play is that the children can achieve all areas of learning within the EYFS – there are no limits. For example, a child might use a stick to write in the sand (Literacy), or they could use it to form patterns/shapes (Maths). Alternatively they might choose to build a bird house (Understanding the World), build an obstacle course (Physical Development) pretend it's a guitar (EAD) or make up a game with the sticks (Personal, Social and Emotional Development).

Children's learning can be extended by asking open questions that encourage critical thinking such as:

- Tell me about your creation
- How do you think we could make....?
- What do you think might happen if....?
- Why do you think that hasn't worked?
- What else do you think we could do?

Children love to talk about their creations and asking these questions encourage children to talk and this, in turn, builds their vocabulary which is a government focus presently.

These types of questions model to children the creative process of thinking and encourages the sharing of ideas, whilst also suggesting that there are a number of ways of doing things and finding solutions. In order to support this process, it is important that you allow children plenty of time to talk and think without rushing them towards a solution.

School Aged Children

Loose parts play benefits children of all ages. If you are caring for school aged children, providing loose parts play in your setting can help develop:

- **Creativity and Imagination:** Loose parts play encourages children to use their imagination and creativity. With a variety of materials at their disposal, they can transform objects into anything they desire, fostering inventive thinking and problem-solving skills.
- **Critical Thinking and Problem Solving:** When children engage in loose parts play, they often encounter challenges and obstacles that require them to think critically and find solutions. They learn to experiment, make decisions, and adapt their play to suit their needs, enhancing their problem-solving abilities.
- **Fine Motor Skills and Coordination:** Manipulating and exploring loose parts supports the development of fine motor skills and hand-eye coordination. Children handle different objects, manipulate them in various ways, and learn to control their movements with precision.
- **Social Interaction and Communication:** Loose parts play encourages social interaction and collaboration among children. They can work together, negotiate roles, share ideas, and communicate their thoughts and intentions, fostering teamwork and social skills.
- **Emotional Development:** Loose parts play allows children to express their emotions and develop emotional resilience. They can create narratives, act out scenarios, and explore different feelings and perspectives, supporting emotional understanding and self-regulation.
- **Cognitive Development:** Loose parts play stimulates cognitive development in various ways. Children engage in problem-solving, spatial reasoning, mathematical concepts (counting, sorting, categorising), and scientific exploration (cause and effect, properties of objects), promoting cognitive growth.

- **Independence and Self-Directed Learning:** Loose parts play empowers children to take control of their play experiences. They become self-directed learners, making choices, setting goals, and taking responsibility for their actions. This autonomy supports their confidence, independence, and self-esteem.
- **Environmental Awareness:** Using natural and recycled materials as loose parts can foster an appreciation for the environment. Children learn about the properties and characteristics of natural materials, gain a sense of stewardship, and develop a connection with the natural world.
- **Versatility and Adaptability:** Loose parts play offers endless possibilities and can adapt to children's changing interests and developmental levels. The open-ended nature of the materials allows for exploration, experimentation, and creativity, catering to a wide range of individual preferences and abilities.
- **Joy and Fun:** Ultimately, loose parts play is incredibly enjoyable for children. It taps into their innate curiosity, sparks their sense of wonder, and provides opportunities for unstructured, imaginative play, resulting in a sense of joy and fulfillment.

About Childminding UK

Childminding UK has been supporting childminders for over 30 years. Formed in 1991 by and for local working childminders in Northamptonshire, we now support childminders across the country. A registered charity, we are the only national organisation that solely supports childminders and we have recently achieved the Princess Royal Training Award for 'Ensuring high quality childcare through training and support'. All staff are experienced childcare professionals and have been childminders themselves and our trustees are working childminders or have knowledge of childminding, so we have a good understanding of the sector.