PLAY MATTERS

Why Play Matters in Early Childhood

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Foreword

By Michael Rosen

Play is serious. Sometimes it's hard to get this across to people. That's because we think of play as something we do for fun, something we do when we can stop doing the real stuff like work, organising our lives or dealing with necessities. We play in order to not do serious things, we might think.

When we come to look more closely at play, we see a whole landscape of human activity in which people are discovering the nature of the world around us, experimenting with what's possible and, when dramatic play is involved, working out relationships and even how we learn that humans are creatures who translate the world through the use of signs, symbols and language (which is itself a symbolic sign system).

This makes play sound as if it's some kind of intellectual assault course, but we all know that play is enjoyable and voluntary. If it's not enjoyable and not voluntary, it's best not to call it play!

So what is play? I like to think of it as 'trial and error without fear of failure'. We can play with materials - paint, clay, mud, water, stone, wood. We can play with sound with our voices, through hitting, blowing, scraping, vibrating. We can play with language on surfaces, on screens, with our voices. We can play with what we find. We can play with what we (or someone else) has made. We can have an idea where play might lead - or not. For it to work, we must feel free to do it and to carry on doing it.

Play is not value-free. It's quite possible for play to be cruel, unfair, vicious or anti-human even. That means that we must ensure that the play we care about and encourage is intertwined with care about equality and freedom, and is itself free of oppression, segregation and persecution. It must be sensitive to unwitting or deliberate exclusion.

Play can be solo or co-operative. We might want to think of co-operative play as one of the greatest achievements of the human spirit, the activity that can take us forward to overcome the forces that would destroy us, the activity that can take us forward to overcome the greatest challenges that the human race faces.

We use the word play to describe what we do when we play games. Playing games is obviously great fun and we need fun to support our lives. When thinking about play, we might want to distinguish between the games we play in which we play according to rules that have been set by others and the games we play where we invent the rules ourselves. This second kind has particular value because, we discover that we have the power to make and change the world.

Does that seem grandiose and overblown? When we look at a child building a sandcastle where the waves are going to wash it away, is that child really learning that they have the power to make and change the world? In a way, yes. They are learning that they can change the sand on the beach, affect how the water washes in, learns how the power of the waves can erode and wash away heaps of sand. This is change and how I as a human am part of change. And this moment is actually not all that different from the moment when Alesandro Volta discovered that what we call electric current could travel through metal, or that Franklin, Crick and Watson discovered the double helix. They all had to play with materials, bringing different elements and ingredients together and observing outcomes. The world has never been the same since the work (play!) of Volta, Franklin, Crick and Watson.

This is why those of us who are educators have to help children play with what's around them and what we give them. They will discover the changes they can make, they will make meanings, and they will discover things about themselves, the most important of which is that they can discover possibilities. The world is not a fixed thing devoid of the possibility of change. They are not excluded (or should not be excluded) from the possibility of change. They are (or should be) part of the possibility of change.

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Dr Aaron Bradbury

"Play is the highest expression of human development in childhood, for it alone is the free expression of what is in a child's soul."

Friedrich Froebel

Firstly thank you for taking the time to download this document on play, and why it really matters in the earliest years of a child's life.

At the beginning of this journey, many professionals wanted to work collaboratively to bring about a positive message on why play is so important for our youngest children and more importantly how it can be used as a tool and approach for development. This document has united early childhood professionals to champion the power of play for children aged 0-8 years. Rather than debating play based learning, we focused on a shared goal by prioritising children's development through play.

In recent years, early childhood education in the United Kingdom and more so in England has shifted towards more formal learning which has its place but equally so does child-initiated play. In my own opinion there is room for both. Research supports the importance of play in cognitive, social, and emotional growth, reinforcing its role in a well rounded early years curriculum. Play Matters is a response to advocating for a child-centred, research backed document on play that fosters creativity, imagination, and holistic learning of our youngest children.

Our movement has gained momentum, with professionals, including those from education, psychology, health and play therapists, contributing their expertise collaboratively. Thank you to all of these professionals for taking the time to develop such an insightful document on play and to the organisations that champion the importance of play in the early years.

Dr Aaron Bradbury

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Introduction

Play is at the heart of childhood, shaping the way children learn, grow, and connect with the world around them. The Play Matters project is dedicated to championing the importance of play in all aspects of children's lives, with a particular focus on ensuring that the early years sector recognises and values both play and the child. By providing parents, early childhood professionals and caregivers with practical resources, Play Matters empowers adults to integrate play into daily routines, enriching children's development. Beyond individual practice, the project also seeks to influence policies and initiatives that prioritise play as a fundamental aspect of child wellbeing. Ultimately, Play Matters aims to foster vibrant communities where every child has the opportunity to experience the joy, creativity, and learning that come through play. A play environment is not just about fun, it is a vital space where children develop essential social and emotional skills. Through play, they form strong relationships, build trust, and learn how to navigate interactions with others. By fostering a play-rich setting, early childhood professionals and caregivers provide children with the foundation for meaningful connections that will support them throughout their lives.

The Play Matters project aims to:

1. Advocate for the value of play in all aspects of children's lives and more importantly to advocate for an early years sector that values play and the child.

2. Equip parents, early childhood professionals, and caregivers with practical resources to incorporate play into daily routines.

3. Influence policies and practices that prioritise play as an essential component of child development and wellbeing.

4. Foster communities where every child has the opportunity to experience the joy, creativity, and learning that comes through play.

Adult: Knock Knock, let me in!
Child: No…you cannot come in and return to play in childhood anymore, you can play in the adult world now…
Adult: but if I play from the adult world will it be the same play that you play?
Child: well we will both be playing…we might look similar but how do any of us really know about each other's play I wonder…

Play Matters offers dedicated advocates opportunities to engage in dialogue and reflect on play, exploring shared meanings, knowledge, and insights about children and the opportunities created through play. Investigating ideas collectively provides a valuable opportunity to reflect on where our values and beliefs about play originate. Considering how our own childhood experiences, professional roles, and training influence our understanding of play serves as a starting point for growth and deeper insight. Play Matters reminds us that play belongs to children; we, as adults, are the learners.

Allen et al. (2019) argue that play is more than just learning; it extends beyond what adults see or understand, beyond a curriculum, and certainly beyond what can be assessed. For children up to the age of 8, as with all children, play embodies the right to explore, investigate, and learn through engagement, activities, and practice (UNCRC, General Comment No. 7). Exploring ideas about play requires dialogue, challenges, and openness. For instance, the relationship between children's play and "educating children" often seems caught between a bottom-up pedagogical approach associated with the former and a top-down curricular agenda associated with the latter. Most importantly, children will play regardless of what adults believe play is; they always have and always will. Play is their means of exploring, investigating, manipulating, changing, checking, rechecking, and creating in countless ways—leaving adults with the challenge of capturing the essence of play through observation and immersion.

Loris Malaguzzi, in his poem '*No Way. The Hundred Is There*' (Edwards, Gandini and Foreman, 2012), reminds us that children express their worlds in a hundred ways, and then a hundred more, through doing, being, thinking, knowing, listening, speaking, loving, dreaming, discovering, inventing, and enjoying. As children engage in metacognition, reflection, problem-solving, adaptation, creation, and attunement to their realities, "they steal ninety-nine." But who steals ninety-nine? We, the adults do, those who believe play can be judged, measured, assessed, and conformed to fit a predetermined structure. Malaguzzi challenges us to reflect on how adults attempt to manipulate play to serve specific agendas (Daniel, 2022).

Allen et al. (2019) promotes the art and act of reflective dialogue within everyday practice, encouraging self-assessment regarding why we do what we do. They urge us to question whether our actions align with our intentions and whether they are appropriate. Schön (1987) advocates for authentic reflection both in action and on action: rather than relying on surface level reactions, we should engage in deep reflection on habitual practices. Reflective and diffractive thinking provide clarity in decision-making. Allen et al. (2019) acknowledge that it is healthy to challenge our beliefs and everyday practices, without such reflection, nothing changes. These points represent just a fraction of the strategies, knowledge, competencies, and capabilities that those working with young children must continually develop to ensure high-quality provision (Bradbury and Swailes, 2024).

Etymology of play

Play is a word that originates from Old English, when it meant to be active, to occupy, to engage, to make, to create, to be busy. All of these meanings capture a concept of play that is much broader than having fun, and much broader than learning. The question is 'do we understand play in its complexity?' Many of us still remember far into adulthood the emotions, fun, challenges, risks, laughter, relationships and insights that unfolded during our childhood play. A fond memory made over 50 years ago from a summer spent with cousins and other children on a farm, where we created a world far away from the reality of the adult world fondly lingers. Separation between childhood and adulthood; 'Will you play with me?'

There are five magical words children use to invite us into their worlds: 'Will you play with me?' This is an invitation that can be missed, taken for granted or embraced with delight. Play Matters is a reminder to carpe diem and seize the moment when invited to play. Play belongs to children, let us follow their lead and interests to learn about:

(i) play
(ii) the child
(iii) new realms and realties.

We must remember that when we enter or observe a child at play, we are never fully sure of the rules, realms and reflective cognitive connections being made. This is why authentic dialogue with the child is needed, because through authentic dialogue children and adults learn from each other, also during play.

Listening during play

Let us reflect on the meaning of listening during play as developed within the field of Early Childhood Studies (ECS) (QAA, 2022), as well as in cognate fields of Childhood Studies and Children's Rights Studies. ECS has produced a convincing distinction between purposeful listening and real listening (Lundy, 2012; Murray, 2017, 2019; Scollan and McNeill, 2019).

Children play an active part in their creations and learning experiences which are core for Early Childhood Education pedagogy, ethos and methods. Gabriel (2017), Farini and Scollan (2023) argue that Early Childhood Education is a pedagogy of listening that values the voices of children not only to capture children's needs, but also because the voices of children can bring about children's knowledges that are considered a resource for all participants in the educational relationship: this is a cornerstone for a rights-based pedagogy also in the context of play. Listening, immersing and tuning into play are core pedagogical characteristics of rights-based play.

When children play we are offered an opportunity to observe their unique and individual creativity, curiosity and life experiences (Schon, 1987; Bruce, 2012; Sims et al., 2015; Allen et al., 2019). However, those with an interest in learning about play from those who are playing require a critical and conscious gaze. Tovey (2012) reminds us that pedagogy and engagement with play constantly evolves during observation and practice. Bruce (2012) and Allen et al. (2019) advocate for a continuing critical engagement to maintain self-awareness of how underpinning values, beliefs and expectations can shape professional practice and perspectives. Here we are invited to consider how our professional training, life experiences and memories influence our current expectations around play.

Early Childhood Education has a vision of play that positions children and adults as both teachers and learners depending on context, circumstances and opportunity (Tang and Maxwell, 2007; Tisdall and Punch, 2012; Georgeson et al., 2015; Early Years Coalition, 2021). This vision is not compatible with the idea of play as a tool to support learning, because this implies that adults would take over ownership of play. Play is more than learning, more than a curricula, and more than adults' agenda. This is a point requiring voice, advocacy and more dialogue, because it related to the viability of child-centred approach to working with children, of which the approach to play is an essential component.

Although the term 'child-centred' is often used as self-evident, Chung and Walsh (2000) found over 40 definitions of child-centredness, suggesting that the concept is much more elusive. Chung and Walsh recognised three dominant meanings of child-centredness: 1) the child at the centre of his world; 2) the child at the centre of schooling; 3) the child at the centre of his or her learning. The second meaning, child-centred practice in school settings is used to describes the commitment to support the development of the child towards adults-defined expectations. This is an idea of education from the adult, for the child, where play is one of the tools of the education trade, that can be used to support learning. The first and the third meaning, one referring to children's experiences in the broader sense, the other with a focus on children's learning, are compatible with a concept of play enough rich and complex to embrace all the many possible things that can be achieve through play. The child at the centre of his or her world and learning replaces the centrality of adults' expectations, making learning in the narrow curricular sense only of the possible aspects of play. In this way, play can embody the active role of children in the construction of the learning environment, identified as education from the child.

If freed from the shackles of adult-planned and directed learning, play can become a centrifugal force (Bakhtin, 1981) that multiplies diversity, offering opportunities for creativity, difference and openness. Play as a centrifugal force refers to creativity, autonomy and self-determination, demanding adults to withdraw from the hierarchical domination of play as a learning tool, embracing unpredictability and celebrating the possibility of learning from children.

Play is generally regarded as an enjoyable, spontaneous activity that is not goal-oriented but instead characterised by anticipation, flow, and surprise (Barnett and Owens, 2015). It can be described as both an objective and subjective experience, involving observable behaviours and internal emotions. The UN Convention on the Rights of the Child (UNICEF, 1989) emphasises that play is fundamental to children's holistic growth, learning, and development. Through play, children construct meaning about the world around them. A key aspect of play is children's autonomy and independence, which serve as its foundation (Tovey, 2020; Bradbury and Swailes, 2024).

This document will navigate you through key concepts of play in the following areas:

Play and joy; Playful learning from birth; The playful brain; Quality play, Play and technology, Play and special educational needs and disabilities; Physical development, outdoor learning and play; Play in the early years curriculum; Play in school based settings; Play and sustainability; Play, love and nurture and Play therapy.

We know that there is so much to cover on play. However, we want to highlight the need for a balanced document that focuses on the child in society today. Valuing and respecting the diversity of individuals, families, and communities should be central to early years practice. Inequalities continue to exist in society, impacting children's education, health, and future opportunities. Early years settings play a crucial role in actively challenging discrimination and prejudice. By doing so, they uphold the requirements of the Equality Act 2010.

Early childhood professionals should actively challenge stereotypes and misconceptions as they arise in play, conversations, books, and other contexts. This includes topics related to communities, families, languages, gender, special educational needs, disabilities, race, ethnicity, faith, and cultures. By fostering an inclusive environment, settings can celebrate the diversity within them. Early childhood professionals bring valuable perspectives from their own diverse backgrounds, which should be recognised and appreciated and celebrated.

Play should allow us to focus on the child at the centre, recognising that each child is unique. Every child arrives in an early education setting with a rich heritage shaped by their home, family, life experiences, and beliefs—foundations that form their identity. These differences create valuable opportunities to learn from and celebrate diversity.

Early Childhood Professionals should acknowledge that children have their own perspectives on their lives and identity. Their voices must be at the heart of their learning, with their knowledge and experiences respected. Actively embracing home stories and valuing family traditions helps children build a strong and positive sense of self.

Bradbury and Grimmer (2024) emphasise the crucial role of a loving and nurturing playful environment in supporting the unique child. They challenge the assumption that the play environment is separate from the individuality of the child, arguing instead that it plays a fundamental role in enabling children to thrive. According to them, the environment is more than just a physical space—it is shaped by relationships, interactions, and an ethos of care. They highlight the significance of love and nurture in creating spaces where all children feel valued and supported.

There are many ways in which play supports a child:

1. Play Environment: This is a powerful foundation for fostering meaningful connections between children, early childhood professionals, and peers. Play is a natural way for children to explore, communicate, and build relationships, making it essential for their social and emotional development in a play led setting, Children engage in collaborative activities such as role-play, building structures, or problem-solving games. These interactions allow them to develop essential social skills such as sharing, turn-taking, negotiation, and empathy. Through these experiences, children learn to understand others' perspectives, strengthening their ability to form relationships.

2. Builds Trust and Emotional Security: When play is child-led, children feel a sense of autonomy and control, which fosters emotional security. In environments where early childhood professionals actively engage in play, children develop trust in adults as supportive and responsive figures. This sense of security encourages open communication and deeper connections between children and caregivers.

3. Strengthens Relationships Through Shared Experiences: Play creates opportunities for shared joy, laughter, and problem-solving. Whether through imaginative storytelling, constructing a den, or exploring sensory materials together, children form bonds through these shared moments. Positive interactions in play help solidify friendships and create a sense of belonging.

4. Supports Emotional Expression and Understanding: Through play, children express their emotions, process experiences, and make sense of the world. Role-playing and imaginative games allow them to explore different emotions in a safe and supportive environment. Early childhood professionals can use these moments to help children understand and regulate their feelings, reinforcing positive connections with others.

5. Encourages Inclusive and Cooperative Play: A well-designed play environment promotes inclusivity, ensuring that all children, regardless of ability or background, feel valued and included. Open-ended materials and group activities encourage children to work together, strengthening their ability to form diverse relationships.

6. Deepens the Child to Adult Bond: When early childhood professionals and caregivers engage in play with children, they build a deeper connection through meaningful interactions. By observing children's interests and joining their world of imagination, adults show that they value and respect the child's ideas. This strengthens trust and nurtures a strong, supportive relationship.

Chapter 1: Play and Joy

> *A child can teach an adult three things: to be happy for no reason, to always be curious, and to fight tirelessly for something*
>
> *(Unknown)*

The Benefits

The joy of childhood is often remarked upon as something precious. To witness an infant experience unrestricted joy provokes feelings of happiness and satisfaction in us as adults. Human laughter, joking and smiles are manifestations of our sense of safety and wellbeing (Kingston-Hughes, 2024). From an ethological perspective, laughter arises out of and serves to reinforce our social connectedness and survival chances. Examining the development of laughter in babies, Sroufe and Waters (1976) conclude that cognitive and social-emotional aspects of human development are inseparable. Joy is beneficial for our physiology, mental state and our attachment to carers and community. It also benefits our cognition and supports children's peer relations (Karjalainen, 2020).

Joy and Laughter in Early Years Settings

A study by Cekaite and Andrén (2019) in Sweden, examined laughter patterns between preschool aged children (3 -5 year olds) and their adult teachers in an early education context. They discovered that these children directed their laughter towards their peers nearly 90% of the time seeking affiliation through the peer group whilst adults concentrated on "the institutional and educational goals" (Cekaite and Andrén, 2019, p.15).

Other interesting findings were:

- Adults laugh much less than children
- Adults mainly laugh with adults
- Children laugh more when adults are absent, typically during play
- Adults very rarely respond to children's actions to invite laughter
- A third of the time, adults ignore or reject children's laughter

As adults we reflect on and rue the fact that laughter as a proxy for joy appears to diminish with age. Children experience more joy and laughter in their own free play, particularly when adults are not present. If joy and laughter are efficacious, why do our educational systems both subconsciously and consciously curtail them?

A review of both the Early Years Foundation Stage Statutory Framework (EYFS) (Department for Education (DfE), 2024) and the non-statutory Development Matters (DfE, 2021) document reveals zero matches for the terms 'joy' and 'laughter'. In the light of research demonstrating their importance to children's welfare and cognitive development, this seems to be a strange omission. When it comes to education, we somehow dilute these to the lesser term 'enjoy'.

Controlling Children's Right to Express Joy

When our children are born and in their first few months of life we delight in their smiles and laughter. It is our ambition for them that they should experience the fullness of joy as they start to develop but there comes a point when adult direction of social expectations constitutes control of children's emotions such that they become aware of when it is appropriate to experience and express joy and when, in adult company, they must suppress these and comply with an imposed agenda. Their world becomes divided into work time and separate play time. Where children are granted "free play", this may comprise adult directed options, so called "purposeful play" with implicit or explicit expected learning outcomes. As we have seen, the likelihood is that this generates less laughter and less joy. How far do we control and curtail our children's joy? From what age do we start to impose expectations of outcomes from children's play that follow an adult agenda of learning outcomes?

Joy through Play as a Crucial Biochemical Process

One vital aspect of joy is its biochemical impact (Kingston-Hughes, 2024). Neurobiological studies into happiness show that biochemicals such as serotonin, oxytocin and dopamine are produced in moments of happiness. These neurotransmitters have strong anti-depressant properties which explains the powerful impact of joy as a therapeutic process. When a child experiences joy, their emotional wellbeing is significantly improved. One of the primary ways in which we can increase levels of joy is through play.

Dopamine production substantially increases when happiness is surprising or unexpected. This phenomenon is well known by anyone finding a ten-pound note in their pocket which they had forgotten was there. The degree of happiness is clearly disproportionate to the amount of money found (Berns et al., 2001). Play is unique in that the self-directed nature of play ensures children are constantly creating novelty in their own world, effectively creating the "tenner in the pocket" feeling and increasing dopamine production, a chemical vital for wellbeing.

Loose Parts Play and Imagination (A Playground of the Mind)

Studies into human imagination have shown a significant amount of activity in the brain. A large neural network is responsible for even simple imagination, meaning that imaginative play creates extremely high levels of brain activity. Statements proposing that Play does not use much of the brain are therefore clearly inaccurate as much of children's play is imaginative. The lead scientist behind one such experiment, Schlegel actually describes imagination as a playground,

"……the organization of our brains sets us apart from other species and provides such a rich internal playground for us to think freely and creatively"

(Schlegel et al., 2013).

Loose Parts play is crucial for providing joy. The exploration of stimulating resources, engages children's imagination as they investigate possibilities, spontaneously creating something from disparate objects. This involves extremely advanced problem solving and significant brain activity.

The act of spontaneously creating something new also increases dopamine production, meaning that there is a significant impact on wellbeing.

It is no coincidence that Lieberman cites spontaneity and joy as key foundations for imagination and creative problem solving (Lieberman and Edwards, 2014). She states that spontaneous joyful experiences in early years are critically important for developing a creative problem-solving mindset in adulthood.

Loose parts play is the very essence of spontaneity and joy making it a fundamental mechanism for developing creative problem solving and imagination.

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SCAN ME!

Becoming Curators of Joy

Even in more structured educational environments, early childhood professionals can find entry points for play and joy which can spark a cultural shift across entire settings. For instance, one inner London setting implemented a 'No Toys Week', replacing commercial toys with open-ended materials and repurposed items. This inspired children to invent their own games, collaborate in new ways, and persist through challenges. Teachers reported increased engagement, laughter, and professional fulfilment, demonstrating how valuing play in an unhurried environment can create self-sustaining cycles of joy and learning. Such joy-filled spaces enable children to build competence, self-worth, self-determination, and stronger social connections (Guay, Ratelle and Chanal, 2008) but also benefit early childhood professionals too, fostering professional fulfilment and a shared sense of purpose.

So, how can we become curators of joy? Teachers, early childhood professionals, childminders, carers and parents all play a pivotal role. Joy-centred early childhood professionals act as reflective facilitators who value children's ideas, play choices, and relationships. Another example comes from a setting that adopted an 'in-the-moment planning' approach, where children's ideas and interests led the way (Ephgrave, 2018). Early childhood professionals using this approach reported feeling joy themselves as they became fully present with children, finding fulfilment in witnessing and sharing their curiosity and enthusiasm. This highlights the reciprocal nature of joy in learning environments and the potential to bring joy back into the teaching profession.

Other practical steps to foster joy include curating environments filled with natural resources and open-ended materials offering diverse affordances, such as loose parts, real tools, and recycled items, which enable play and spark curiosity, creativity and problem-solving. Engaging families and communities through donations of materials that can be repurposed is another way to build connection and environmental responsibility as we advocate for play. However, for joy to flourish, children need uninterrupted time and space to deeply engage in these processes. It is when we experience awe and joy that we activate the brain's default mode network, unlocking creativity and divergent thinking and deepening our neural connections.

The Case for Advocacy

In a world where children's time is increasingly structured and outcome-driven, we must advocate for the need for play and joy in early childhood education. Joy is a powerful catalyst for learning, with neurobiological research showing that joyful experiences activate key neurotransmitters essential for wellbeing. Dopamine, in particular, thrives on novelty—an inherent quality of play—fuelling intrinsic motivation, curiosity and perseverance which are sought-after 21st-century skills and vital for lifelong learning and adaptability (Hagenauer and Hascher, 2014).

As we have seen, unstructured and self-directed play offers rich opportunities for learning, creativity and emotional growth. Loose parts play, for example, prompts children to explore, iterate, and innovate, engaging high levels of brain activity while laying the foundations of imagination and problem-solving (Lieberman and Edwards, 2014). Such experiences foster creative habits of mind, nurturing resilience, critical thinking, and a sense of capability essential for navigating an unpredictable future. Equally important is joy's social dimension, which strengthens connection, belonging and attachment—integral to cognitive and social-emotional development (Sroufe and Waters, 1976) and the basis for children to feel free to explore wholeheartedly in ways that bring them joy. Who wouldn't want children to want to return to school each day with a genuine thirst for learning? It is the sense of safety, care, connection and autonomy to play that generates joy.

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SCAN ME

Lastly, as with play, joy takes many forms. It can emerge through music, movement, or the process of creating something meaningful. Teachers become curators of joy by tuning into these sparks, celebrating, recognising and nurturing them, or stepping back to let the magic unfold.

Joy as a Catalyst for Learning

Ultimately, joy is not a distraction from learning; it is its catalyst helping children ask profound questions about themselves and their world and to make sense of it all in powerful ways. Yet terms like "joy" remain absent from educational frameworks such as the EYFS. This omission calls for an urgent paradigm shift—one that recognises joy and learning as inseparable. By centring play and joy in our educational approaches, we can enhance wellbeing for both children and early childhood professionals, prepare children for the complexities of an ever-changing world, and reclaim their right to a joyful and fulfilling childhood.

Key Statements

- Joyful experiences produce positive biochemicals such as serotonin, oxytocin and dopamine.
- Imaginative play activates a huge neural network in the brain.
- Brain growth is experiential - areas of the brain that are active grow faster.
- Novelty promotes increased dopamine production.
- Key foundations for creative problem solving are joy and spontaneity.
- Loose parts play provides opportunities for joy, imagination, creativity and spontaneity whilst simultaneously creating novelty and creating a huge neural network of brain activity.
- Loose parts play is therefore one of the most neurologically rich experiences a child ever engages in.
- Our children deserve the "tenner in the pocket" feeling every day.

Case Study
Ben Kingston-Hughes

A few years ago I worked with a group of children who had a wide range of adverse childhood experiences including severe abuse and neglect. On meeting the children they were fearful of our team and looked at us as if they automatically expected us to hurt them. We decided to try some superhero play and provided old bits of material for capes and masks for them to dress-up in. We also insisted that all the other adults present dressed as superheroes too regardless of their roles. Foster carers, social workers and even the clinical psychologist assigned to the project were "made" to dress up too. We then ran around outside being superheroes. There were no rules and no adults telling children what to do, just a bunch of children and adults running around being silly together. It was only when all of the adults had their capes and masks on that the children started smiling for the first time that day. Then one young boy stopped in his tracks and started laughing out loud. He then started choking and had to be helped by a member of my team. He was absolutely fine and after a drink of water he carried on playing with all of the other children. I forgot all about the occurrence until the end of the session when after all the children had left, the boy's social worker came up to me and said, "I think that is probably the first time he has ever laughed."
I had forgotten how vulnerable those children were because once we all became superheroes together it did not feel like a session with vulnerable children. However, for that one child it was a unique moment of joy through play which transcended anything he had ever experienced in his life.

Chapter 2: Playful Learning from Birth

> *It is not that man must develop in order to work, but man must work in order to develop. The work of the hand is the expression of psychic growth*
>
> *(Maria Montessori, 1946)*

This chapter highlights the pivotal role that 'play' and 'playful learning' embraces in supporting very young children's learning and development, from birth as an international approach. A focus on play often provokes some opposing positions – 'play' that is frivolous, pleasurable and unproductive versus 'play' that is crucial to child development; emotionally, neurologically and physically, thus considered the core of learning (Bruce, 2001, 2012; Whitebread et al., 2012; Allingham, 2024). Of course, there is also some middle ground thinking about the value of play, adult led in the continuous provision environment plus play that is just a 'fill in' to fit in around the curriculum (Moyles, 1989, 2014). As such, 'play' is often dismissed within the overall debate about education and the prescriptive formality of performative learning. In this chapter we highlight play as the foundation of imagination, creativity and learning. In making reciprocal connections that have meaning for very young children (Boardman, 2024), we do not dismiss the power of play for all children's learning and development in the Early Childhood and Education (ECEC) sector.

For many young children, play is joyful, bringing together the awe and wonder of new and repeated experiences to support the inquisitive minds of very young children. Young children's curiosity is the key driver for play, which then becomes a liberating experience that does not necessarily need to have a such a rigid definition (Bottrill, 2022). Intrinsically, play does not always need a purpose to be meaningful (Owen and Turvill, 2021). Therefore, play is certainly not a means to monitor progress outcomes of young children within the pretext of adult-led play. This chapter considers play from the perspective of the child as *a way of being* (Appleby, 2011).

Whilst other chapters have considered the many definitions and dimensions of play, this chapter will focus on and respect playful learning to enable a reframing of learning through play and set the scene for learning from birth. What we mean by this is we are considering a rich curriculum within an enabling environment alongside a playful pedagogy.

Playful Learning from the Very Beginning

From the earliest moments of life, playful interactions begin. We know from many researchers that babies have a social brain, therefore the key interactions and connections created in play are meaningful. "Play is a prime context for learning and development" (Evangelou et al., 2009, p. 4) and is holistic in nature. Babies and young children are active learners; explorers and innovators who bring everything that they know into their learning experiences. As adults, we plan and create engaging places and spaces to support play and playful learning. All our environments for babies and young children are already carefully considered and planned by adults, which is sometimes overlooked, yet does need to be acknowledged within our pedagogy of play.

Play is crucial for babies to begin to explore their environment and to make sense of the new information and experiences presented every day. The experiences babies have during their play supports their developing brains. Chapter three explores this in further detail. When babies are playing and moving, they are practising many complex critical thinking skills. Let's think about some of these skills in action. Babies are constantly:

- Making decisions about what, how and when to play – playing alone or with others, making choices;
- Using all of their senses to explore new and familiar objects, testing out how things work, experimenting with sounds and textures and their own bodies;
- Making new discoveries, repeating, practising and expanding new knowledge about their worlds and their place in the world, especially when outdoors in nature;
- Learning about cause and effect, what happens next, what happens if...
- Taking time to find out about their complicated lives – being able to think about the world differently, using imagination, learning about themselves.

Gopnik (2010) advocates that play is about being yourself in your own world, which is so powerful. Play is something that babies and young children do for themselves.

Video provided by

Siren Films

SCAN ME!

Given the centrality of play, it is vital that adults working with babies and young children, particularly those under the age of three, have a strong knowledge and understanding of child development and how children learn. This enables adults to plan and facilitate playful learning experiences that are purposefully designed to support and enhance learning and development (Wood, 2013). For example, adults should;

- Respond appropriately and understand children's interests, needs and behaviours can effectively plan playful experiences for babies and young children;
- Create supportive environments to foster spaces that encourage exploration, discovery, curiosity, awe and wonder;
- Build meaningful relationships in order to develop stronger, more empathetic, meaningful connections for playful learning.

Babies live and learn through play as an embodied experience (Adolph and Hock, 2019). Our role as the adult is to notice what is happening when babies and young children are developing their own play (Fisher, 2024).

Case Study 'Finding the hook' (Emilia 7 months)

Emilia is sitting up, exploring the resources on the carpet. She picks up a soft, fabric scrunchy book. Emilia turns the pages and stops at various points to touch and feel the textures and taps the pages gently and sometimes loudly. She brings the book to her mouth to explore further. Emilia finds the fabric hook where the book usually hooks onto a cot or pram and chews this for a few minutes, making many satisfactory sounds. She throws the book on to the carpet after a few minutes. She picks up another book. This book is textured and has rattle sounds within, plus a page that makes a squeaking sound. Emilia squeezes the page several times to make the squeaking sound a few times, smiles and then shakes the book. The book is upside down and back to front. She notices a string hook on the inside of this book (it is a tail from an animal), carefully uses her finger and thumb to pick up the hook to bring to her mouth. Emilia chews this for a few seconds and throws the book away.

Emilia leans forward to reach a board book. She handles the book, turning it around, upside down, patting the pages and looking at the pictures in the book. She leans forward again to pick up the soft fabric scrunchy book. Emilia sees the hook and brings it to her mouth, as before. She smiles and searches for the other textured book and finds the hook.

Reflections

This is a purposeful literacy experience in which Emilia is engaged, playing by herself, making choices, testing out and finding the embodied meaning (Boardman, 2024). These playful learning opportunities are vital in supporting babies and young children to explore and find out things about their world.

Can you think about some examples from your own practice when babies and young children have engaged in this way?

Supporting Play for Under-Threes

The endless possibilities of pretend play are crucial for toddlers, facilitating imagination, curiosity and creativity. The toddler's world is highly symbolic and embedded within their individual cultural influences – what they see in their home environments, hear and do. For example, toddlers might begin to use any object as a symbol for an item they use every day – a stick for a spoon, a blanket for a bed or a den. This is important because very young children are naturally curious and interested in what is happening around them. Therefore, under-threes choose their play, lead their own play and are not always dependent upon adults to guide their play – they are already critical thinkers, making sense of their own learning.

To understand the importance of play for learning, as adults we must be knowledgeable listeners and observers. Bruce (2023, p.4) highlights that "play is an integrating mechanism which brings together everything the child has been learning, knows and understands." Through play, the youngest children demonstrate what they have learned about the world across all areas of learning. Fisher (2024, p.28) refers to this as the "cognitive jigsaw" children already have in place.

Enhancing Playful Learning in Nursery Settings

For all our young children attending nursery settings, we need to be mindful that policymakers have already narrowed the possibilities of play through the curriculum goals and outcomes in many of our national and international early years education frameworks, reducing play and playful learning to the core tasks of preparation for school (Skovbjerg and Sand, 2022), performativity and measurement (Robert-Holmes and Bradbury, 2016). Moyles (2015, p.82) highlights that playfulness will always continue to be discouraged, given that it is perceived as a "barrier to getting the work done" - the work of meeting the outcomes set for children within our curriculum frameworks. In an attempt to 'professionalise' play in our early years classrooms, play has been stripped of its playful characteristics, such as having an element of joy, making meaning, being socially interactive, actively engaging and iterative including experimentation and hypothesis testing (Zosh et al., 2017). Playful learning happens when the child is actively engaged, enjoying playing with their knowledge and making connections to other learning. Consequently, playful learning involves the adult being sensitive to and observant of the child's interests and current understandings and building on these, to support their play in more complex ways. For example;

A child picks up two similar wooden bricks, one in each hand, the adult sees this and also picks up a brick in each hand; "Two! One, two!" They use these to start to build a tower, then add to this with another two bricks until the baby knocks the tower down and they both laugh and the game is repeated.

Playful learning is reliant on how adults approach both the children and the experiences they are providing. It is an attitude to working with children; a way of engaging with our children. Playful learning emphasises children's wellbeing and their personal, social and emotional development, as well as their cognitive development - playful 'belonging'.

Case Study 'The Wheels on the Bus' (Ava 26 months)

Ava is in the garden with her Grandma over the summer, using chunky chalks to draw on the ground. Grandma draws a bus, at Ava's request. Ava likes to sing 'The Wheels on the Bus'. Ava draws the wheels for the bus.

Ava notes her balance bike is over on the grass. The back wheel is slightly raised from the ground. Ava crouches down and starts to spin the wheel saying "round and round'. She watches the wheel as it spins round and round. Ava picks up a piece of chalk and places it between the spokes of the wheel of the bike. She spins the wheel again watching the chalk go round and round. Squealing with delight, she then fills up the wheel with the chalk pieces. There is one piece of chalk left. When Ava tries to spin the wheel again, the wheel gets stuck and does not spin anymore. Ava says "not working" and starts to adjust the chalks in the spokes until the wheel spins anti clockwise. The wheel gets stuck once again. Ava readjusts the chalks and spins the wheel clockwise repeatedly. Ava then adds the leftover chalk to the spokes on the wheel – some of the chalks are knocked off as the wheel gets stuck again. "Oops a daisy", Ava says. Ava places the chalks onto the wheel. She looks at the one chalk left over and places this in the front wheel of the bike. The front wheel is resting on the ground. Ava tries to spin the front wheel, but this is hard as the wheel is wedged on the ground and does not spin freely. Ava pushes the wheel backwards and forwards trying to make the wheel spin, saying "Ava do it". Ava's attention then returns to the back wheel. She points to the back wheel and says "that one's working". Grandma agrees. Ava crouches down to spin the back wheel, which is still full of chalks. It spins quickly and some of the chalks fly off. Ava squeals loudly with delight.

Ava studies the, now freely spinning back wheel and says "It's going round". Ava makes a circular motion with her right hand. Grandma repeats "It's going round". Ava refills the wheel with the chalks that have flown off, spins it and stands up. Ava says "it's going round" and laughs. Grandma says "it's like the wheels on the bus". Ava says "yes" and bends down to spin the wheel again. Some chalks fall off again and she replaces them saying "That's better, it goes round".

Reflection

Let's think about how Ava uses play and exploration to develop her thinking – here play is about making connections across contexts, testing, practising and exploring what interests Ava.
Consider the links to the Characteristics of Effective Teaching and Learning and (CoEL) here and how the CoEL support Ava in her playful explorations.

Enhancing Playful Learning in Nursery Settings Continued...

Playful learning requires knowledgeable adults, aware of learning possibilities, who are ready and confident to allow the child to control and respond flexibly with or without guidance (Skene et al., 2022). Regardless of whether the adult or child initiates the activity, there should be space for the child to take control and for the adult to move back and observe, in order to support forthcoming interactions that are tuned into children's interests and build upon these. Remember that play belongs to the child – not the adult.

The 3 prime areas of the EYFS (DfE, 2024) in England, facilitate a specific focus on play. These areas are fundamental in supporting playful learning;

- Communication and Language
- Physical Development
- Personal, Social and Emotional development.

We can, of course, pay attention to all the other areas of learning through these areas. For example:

- by planning for mathematics to take place outdoors and be active we are also considering children's physical development,
- by giving children time to communicate their play ideas in their own ways, we are taking communication and language into account, and
- by responding to children's feelings and emotional responses to play, we are also engaging with their personal, social and emotional development.

The Prime areas are so-called because they lay the foundations for all other learning: 'They are time-sensitive because of biological factors that enable rapid brain connections, particularly in the first three years of life but continuing throughout early childhood.' (Early Years Coalition, 2021, p. 43). The additional four 'Specific' areas of learning (mathematics, understanding the world, expressive arts and design, literacy) are best taught woven through with the three Prime areas. In other words, attention is paid first and foremost to children communicating, being active in mind and body and to developing their emotional and social skills.

Given that each of these areas has a performative outcome (Early Learning Goal) attached to it, which requires evidence, it is easy to see how play can sometimes be forgotten or hidden in the background when we are thinking about planning experiences for young children.

Left Handed Children in Early Years Settings - Handedness and Co-ordination

From birth and throughout their developmental milestones, babies and toddlers gradually establish their hand, eye, and foot dominance. However, there is no definitive point at which this dominance is guaranteed.

Unfortunately, in past generations, children were often forced to adopt right-handedness, regardless of their natural preference. This had significant negative consequences for many left-handed children, affecting their confidence and abilities both during childhood and later in life (Milsom, 2008). Playtime provides an excellent opportunity to observe which hand, foot, or eye a child prefers, offering early insight into potential cross-laterality. (Cross-laterality occurs when a child, for example, is left-eye dominant but right-handed and right-footed, or vice versa.)

Open communication between parents and early childhood professionals is essential in recognising and supporting a child's natural dominance. Understanding handedness can help early childhood professionals and caregivers provide appropriate resources, accommodations, and guidance, ensuring that all children—whether right- or left-handed—receive the support they need.

Recognising and respecting a child's dominant side can also boost their self-esteem and help them perform tasks with confidence, keeping pace with their peers.

Tips for identifying hand, eye, and foot dominance:

- Let the child choose which hand they naturally use when reaching for objects.
- Observe and note whether they predominantly use their right hand, left hand, or both (if undecided). Also, record whether they use fine or gross motor skills for specific tasks.
- Watch for signs of cross-laterality, especially if the child appears uncoordinated or clumsy.
- Check eye dominance by using a fun activity, such as pretending to be a pirate. Have the child look through a kaleidoscope or a toilet roll tube, most will instinctively use their dominant eye.

By fostering awareness of dominance and providing the appropriate support, we can help children develop confidence, coordination, and essential life skills.

Characteristics of Effective Learning (CoEL)

The CoEL are often overlooked in many discussions focused on playful learning. Here, we frame some of the opportunities available in our nursery settings and home settings as childminders to bring this chapter together. The CoEL describe how children learn.

	Characteristics of Effective Teaching and Learning	Context and Focus Examples	Possible scenarios that promote 'Playful learning'
Playing and exploring	Finding out and exploring	Playing with blocks, experimenting with different ways to stack and balance them. Children are trying to build a tall tower but keep knocking it over. As they try again, they observe how some blocks fit better than others. They test different combinations, adjusting their approach each time.	Plan a block area that includes a wide range of a few resources – blocks, small world play, cardboard boxes, lids, loose parts etc. to encourage further exploration, testing and experimenting. Not too many resources - less is more. Space for children to extend their use of playful learning with blocks.
Playing and exploring	Playing with what they know	Painting outdoors – "I'm going to make my picture look like sky"	Support the children in accessing resources, materials, areas of provision to enhance their playful learning, so that they are confident to 'go and get' what they know. Give children ownership of their play and provide open-ended opportunities to connect in and with nature.

	Characteristics of Effective Teaching and Learning	Context and Focus Examples	Possible scenarios that promote 'Playful learning'
Playing and exploring	Being willing to 'have a go'	Two children are outdoors in a sandpit, creating a 'city' with roads, buildings, and tunnels. They use toy cars and trucks to drive around their city. One child says "Lets build a tunnel here for the cars to go through". They work together, negotiating the placement of the tunnel, and experiment with different tools to dig and shape the sand.	Space and time to reflect and experiment and try different ways of doing things. Enhance the children's play with new ideas, e.g. shall we see what happens when we add more water to the sand? Let us try to find out what happens if you use the spoon instead of the scoop. I wonder if we could use something different for the tunnel.
Active Learning	Being involved and concentrating	Small World/Literacy "I am making a house for my people".	Offer time to be engrossed in playing, doing, imagining and making. 'What children can do (rather than what they cannot do) is the starting point for a child's learning' (Bruce 2011, p. 220).
Active Learning	Keep on trying	Outdoors/Physical Three-year-old riding a tricycle is trying to go fast, her feet keep coming off the pedals and the trike veers off the pavement onto the grass. She watches her friends going fast and keeps trying.	Establish risk taking and challenge – try not to get involved too quickly to support. Wait for the child to come to you – encouraging the keep trying, exploring, noticing, understanding themselves and their actions learning approach.

	Characteristics of Effective Teaching and Learning	Context and Focus Examples	Possible Scenarios that promote 'Playful learning'
Active Learning	Enjoying achieving what they set out to do	One child is playing with a set of pretend kitchen items – pots, pans and food. They set up a 'restaurant' and take on the roles of chef, customers, and waiters. As they 'cook' and 'serve' one child notices that their pretend spaghetti keeps falling apart. They try using different play utensils to fix the problem, like a spoon to 'stir' the pasta and a plate to hold it better.	Offer space and time for children to be engrossed in their playful learning. Adult might support by acknowledging the achievement – Spaghetti is tricky to serve isn't it? But you've done a great job there – I'd like some please? – I bet it's yummy.
Creative and Critical Thinking	Having their own ideas	A two-year-old is playing with Duplo building a high tower. She is making sure that the tower balances by placing bricks overlapping each other. The tower gets too tall for her to reach. She brings the step stool from the bathroom to stand on to make the tower even higher.	Encourage play that has no boundaries with resources – no fixed views about where resources should be and how they are used. Try not to be the adult who wants the two-year-old to put the step stool back in the bathroom or to ask the child to be careful with the high tower. Instead try to encourage having their own ideas. Encourage the use of spaces to enable children to connect ideas.

	Characteristics of Effective Teaching and Learning	Context and Focus Examples	Possible Scenarios that promote 'Playful learning'
Creative and Critical Thinking	Making links	Singing 10 in the bed song during play, a three-year-old gathers some soft toys and puppets and lays them all out in a row of 10. She sings the song and 'rolls over' the toys. She realises that the toys need to 'fall out' so rearranges the toys onto the table to be able to roll over and fall off the table. "Grandma sings to me when I stay at Grandma's house"	Making connections between families, communities and settings is crucial to support relationships and playful learning. Respectful and reflective adult interactions encourages confidence and shared experiences. Adults might join in with this play to boost more shared experiences of songs at Grandma's house.
Creative and Critical Thinking	Working with ideas	Outdoors Weaving Two-year-olds are weaving materials through the outdoor weaving frame. They use the materials in the box next to the frame (ribbon, wool, twine, material) and then also choose objects from the sand tray to begin to weave – some of them do not stay in the frame and fall on the floor.	Support hands on experiences with open-ended materials. Reflective adults encourage children to investigate and make mistakes and can then support the children in finding solutions. Early childhood professionals can demonstrate how to 'weave' the objects into the frame by playing alongside the children.

Chapter 3: The Playful Brain

> *Experiences during the early years strongly influence a child's future development, as development and learning build on what has already been acquired.*
>
> *(Early Years Coalition, 2021, p. 18)*

What is Play for?

Human beings are an organic primate species, which evolved within the niche of a hunter-gatherer. We are physically weak compared to many other evolved creatures, but our strength lies in our linguistically rooted, flexible, collaborative intelligence, and consequently, much of our development period is spent building social and intellectual competence.

For human beings, the natural selection process resulted in a long developmental period that allows individuals to build symbolic acuity, foresight, stamina, mental and physical agility and most importantly, the highly developed social and linguistic competence required to engage in intricate patterns of collaboration, cooperation and competition with one another.

This process has, over hundreds of thousands of years, led to increasingly sophisticated technological innovation; the creation of artefacts and machines that give us mastery over the natural environment (for example, houses, hand tools, aeroplanes and computers). However, due to the long periods over which evolution operates, human physiology and psychology have not changed for many thousands of years.

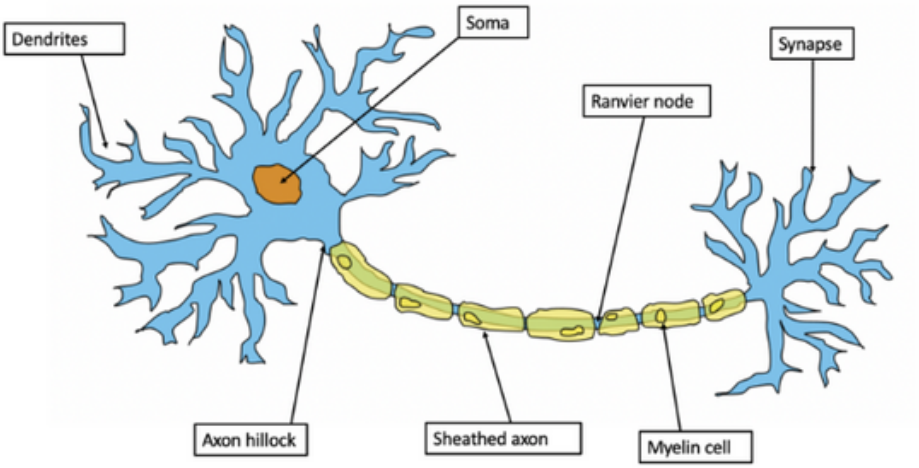
Children are programmed by nature to achieve social, emotional and intellectual development through play activity, most particularly in early childhood. In the post-industrial, information technology-dependent twenty-first century, school is of course important during mid-childhood, for communicating a body of cultural knowledge. However, the requirement for active free play is fundamental and evolved. All mammals and some birds naturally engage in free play activities, most profusely in the early developmental period.

The more complex the adult society, the longer the evolved creature spends in its developmental period, and the more complex the play activities in which it engages. The most complex societies on earth are those created by socially adept, linguistic human beings.

How does Play Build the Brain?

The intrinsic role of play in development was heavily emphasised by mid-twentieth century developmental theorists: "The play of children (and of animals) has an essential functional value… preliminary training for the future activities of the individual" (Piaget and Inhelder, 1969, p.60).

Piaget's mid-twentieth century developmental stage theory proposed that children build mental structures he dubbed 'schemas' from incoming information. Twenty-first century neurobiological researchers discovered neural networks operating within the brain (Crone and Ridderinkhof, 2011). These build cognition in a similar way to that described in schema theory, although neurons proliferate like electrical wiring, creating an intricate network of 'synapses' that build increasingly sophisticated cognitive capacity via spreading activation (Fields, 2020).



Simplified diagram of a neuron, with synapse

As a child's neuronal networks form increasingly complex synaptic connections via their experiences within the environment, they become able to engage in increasingly abstract thought. McConnell (2012) compares this to constructing a telephone exchange, with the first step being to construct just one main line between two major cities, for example New York and Boston.

"Once that initial link is made, when you ring out to Boston from New York, all the phones in Boston will ring. As time goes by, you would gradually construct lines to all the different houses in Boston. Eventually, when you want to ring your grandmother in Boston, you can do so in the knowledge that only her phone will ring" (McConnell, 2012, np).

As a child builds their knowledge base, and their neural network becomes more intricately connected, they become able to process larger amounts of information more quickly, as coordinated sets of connections begin to 'chunk' conceptual cognition in schema-like formations. One result of this is an exponentially expanding ability to access previously learned knowledge to make sense of incoming information.

For example, as childhood unfolds, cats will be linked (within the individual's neural network) firstly to a 'domestic pets' schema which will also include dogs and rabbits, then later to a 'feline animals' schema which will take in lions and tigers. As the child gains further in maturity and experience they will form even more abstract connections, for example to the musical 'Cats'.

'Working memory' – the cognitive mechanism by which human beings bring together previously learned knowledge and incoming information to understand ongoing events and conversations- gradually matures within this increasingly intricate network of coordinated thought.

However, all of this relies upon building from the bottom up; the learning brain must contain some existing concept(s), however vague, that incoming information can 'stick' to. Top-down direct instruction inputting poorly coordinated abstract 'facts' that a child cannot connect to existing knowledge resembles connecting a memory stick to a PC and initiating a file transfer. Human cognition cannot be constructed by such a process, because this is not how human beings evolved; we simply don't 'work' like that.

The brain's neuronal networks are never fixed, or static. They are constantly reorganised, driven by ongoing experience, which strengthen some connections and allow others to atrophy. As soon as children are born and begin to interact with the physical and social world, their brains create huge numbers of synaptic connections. But as time goes by, these pathways are differentially pruned, revised and strengthened, on the basis of usage.

In this way, the brain undergoes a continual adjustment program directed by the flow of "traffic" that ensues. Some pathways go on to become the equivalent of four-lane motorways, some become broad, well-maintained B roads and yet others fade to simple traces. It can be compared to the way in which a large number of people walking across a wooded area will eventually create an increasingly delineated pathway.

Brown and Jernigan summarised the process of neuronal development in human beings:

"At age four… some regions of the cortex are notably decreasing in volume while others are strongly increasing… Consistent with the theme of dramatic architectural "blossoming" in the brain within the preschool years, changes in cortical volume show an early period of striking, widespread expansion that eventually gives way to selective reductions across the cortex by around the ages of puberty"
(Brown and Jernigan, 2012, p.8).

This creation and pruning of the brain's neural networks continues throughout life. However, childhood and adolescence are the life stages during which the neuronal network construction program steadily builds 'from the ground up.' Throughout this period, different areas of cognition 'bloom and prune' on specifically human schedules.

For example, Tierney and Nelson (2009) proposed that in the case of visual and auditory perception, significant pruning occurs until sometime between the fourth and sixth year of life, whilst pruning in areas involving higher cognitive functions continues until the end of adolescence. They comment that this process is essential for human beings because of their evolved capacity to attune and flexibly respond to the physical and social environment into which they are born.

Myelination of the synapses is a related process which gradually occurs as the synaptic pathways proliferate. Myelin is a fatty substance that forms around synapses. It performs a similar function to insulating tape around electrical wiring, allowing chemical-electrical transmission signals within the brain (action potentials) to travel more quickly between synapses. Again, with respect to the higher cognitive functions, this process is not complete until the end of adolescence.

"Although basic sensation and perception systems are fully developed by the time children reach kindergarten age, other systems such as those involved in memory, decision making, and emotion continue to develop well into childhood" (Tierney and Nelson, 2009, p.12).

This explains why attempts to accelerate young children's absorption of 'knowledge' by simply 'telling them things' risks creating the opposite effect to the one that is intended; rapidly introducing young children to ideas that they cannot 'stick' to existing concepts within memory may cause stress and confusion, damaging readiness and confidence to learn.

Human beings are not libraries or programmable computers. They are 'steampunk' evolved organisms that, especially in early childhood, naturally respond to slow and socially immersive learning.

How does Play, Specifically, Assist Neuronal Network Construction?

Psychologist Suzanne Zeedyk proposed that what happens between infants and carers in early one-to-one playful interactions can be compared to an improvised dance, in which babies' early social experiences teach them that human beings communicate in partnership, one speaking/acting while the other listens/watches. During such interaction, each partner gives off non-verbal signals indicating when they want to speak/act, and when they are ready to listen/watch (Zeedyk, 2006).

To become truly what psychologists call 'intersubjective' – able to communicate our meanings to other people and to grasp their meanings in return –infants must initially be immersed in such communicative 'dances' with carers. As infancy progresses, they fine-tune their abilities to engage spontaneously, increasing in competence until they become able to initiate such interactions (Karadag et al., 2024).

Intersubjectivity begins in feeding as the infant coordinates gaze with the adult, vocalising as they latch on and off the breast or the bottle, eliciting adult verbal responses. It swiftly moves on to early play activities, initially introduced by adults. "Peek-a-boo" is a classic example, which is observed cross-culturally (Fernald and O'Neill, 1993). The Center on the Developing Child at Harvard refers to these types of playful interaction as 'serve and return'; a process that builds fundamental connections within the infant brain:

"When an infant or young child babbles, gestures, or cries, and an adult responds appropriately with eye contact, words, or a hug, neural connections are built and strengthened in the child's brain that support the development of communication and social skills.... this back-and-forth is both fun and capacity-building. When caregivers are sensitive and responsive to a young child's signals and needs, they provide an environment rich in serve and return experiences" (Center on the Developing Child, ND).

As childhood progresses, we become competent enough to extend these increasingly sophisticated interaction skills to 'serve and return' interactions with a wider range of people. This will include peers, both in pairs and groups, fuelling ongoing social and intellectual development. Pellegrini and Blatchford (2000) concluded that, for five-and-a-half-year-old boys, the amount of time spent in active social play with other boys directly predicts their level of success in social problem-solving one year later.

Panksepp's (2007) research led him to assert that, like other mammalian young, children have an evolved 'neurological drive to play' and that reducing their opportunities to do so may be suppressing this instinct and thereby leading to increased diagnoses of Attention Deficit Hyperactivity Disorder (ADHD).

Play and 'Storying'

The core human intellectual skills are rooted in linguistic communication. This requires a child to learn how to independently translate highly abstract thoughts into a complex combination of symbols which result in spoken and/or signed language that is both used in internal thought, and in communication of those thoughts to others.

Human beings rely heavily upon an evolved ability to communicate symbolically, making us one of the most cognitively complex species on earth. Language emerges from a mixture of evolved competencies and culturally mediated behaviours; an intricate transaction between nature and nurture. Learning how to use it effortlessly and competently is an arduous process. Along with the development of physical coordination, it forms the major cognitive 'task' of early childhood.

Case Study

18-month-old Kyle attends a childminder three days per week. He can now say about 25 words and he also knows over 50 signs as his parents and childminder use Makaton to support him learning language.

When Kyle was told he was going to walk beside the canal, he signed duck and said, 'Quack!' He was remembering the last few times we had visited there, when we had stopped to feed the ducks.

Reflection

Kyle is translating his abstract thoughts into spoken and signed language.
How might we encourage him as he learns to effectively communicate his thoughts to others?

This creates the foundation of the human imagination; the ability to consider 'what if…' Without this, we would not have the ability to create technologies and artistic products that have never before existed in reality. It is therefore no surprise to discover that the 'once upon a time' concept is present within nearly every human language on earth (Konnikova, 2012). Children's active play, mixed with language is therefore developing this very human skill, playing with the meanings with which they are presented in their existential worlds and reinterpreting these, both individually and collaboratively.

Jerome Bruner proposed that human beings are creatures who evolved to critically rely upon meaning-sharing: "depending upon the human capacity to internalise language and use its system of signs…. such a social meaning readiness is a product of our evolutionary past" (Bruner, 1990, p.69). To become competent human adults, children must learn, through active play experiences, to use language to make sense of every experience they encounter, both with other living creatures and with objects.

Similarly, Vygotsky (1978) proposed that play reveals new knowledge to children before they become able to competently articulate it in words. We are all familiar with infants' sometimes clumsy attempts to communicate ideas that they don't yet have the correct words to convey. For example, as she began to articulate single words, every four-legged animal became a 'dog' for my one-year-old daughter, which we corrected and explained until her vocabulary (and neural network) matured.

As children grow older and their skills in 'naming' improve, they enter the 'what if…?' period, independently and collaboratively exploring narrative underlying action; the advent of 'storying.' One of the most evolutionarily ancient examples of children engaging in this process can be observed in human chasing, catching and 'rough and tumble' play.

"One marked difference between human and non-human primates is that human children accompany their chasing and catching play with language, which creates a basic narrative to underpin their activities… [my] child participants… added… narrative constructs to much of their chasing and catching play, including concepts rooted in the culture of the relevant time, for example Beyblades, Robot Wars, Batman, Disney Princesses, and even the primary hero of the England soccer team of that era, David Beckham. They used gesture alongside verbalisation to communicate meaning, including [primate] play face and play intention signalling" (Jarvis, 2024, p.3).

Why is Language Play so Important?

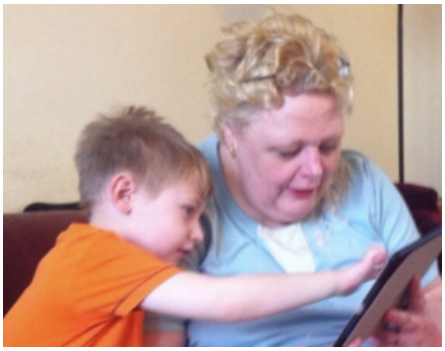
More than a century before the study of neurobiology, Victorian mathematician and children's novelist Lewis Carroll explained to children in simple terms why they frequently wrestle with the flexibility of language, and their consequent need to master it to an extent where they are not only adept at translating sounds into words, but at working out what those words mean, in the context of a specific conversation.

'When I use a word,' Humpty Dumpty said in rather a scornful tone, 'it means just what I choose it to mean–neither more nor less.'
'The question is,' said Alice, 'whether you can make words mean different things–that's all.'
'The question is,' said Humpty Dumpty, 'which is to be master–that's all'
(Carroll, 1871, np).

Adults unconsciously and automatically negotiate this linguistic minefield all the time, using the same words to mean different things in different contexts. For example, is an 'apple' a fruit or a computer? Is a 'printer' a machine, or the professional occupation of one of your friends? Are 'windows' located in your house or on your PC?

With this complexity in mind, it becomes very clear that understanding linguistic communication learning is necessarily a gradual process in child development, involving a great deal of spontaneous practice. They need time and copious experience to become fluent, competent language users, able to fluidly draw upon a wide range of knowledge to make full human sense of their internal thoughts and external experiences within specific culture(s).

This is why, across the first six years of life, learning is most effectively undertaken within socially playful activities. From the beginning of the seventh year onwards, mastery of spoken and/or signed language becomes the platform upon which literacy is built, and, as this proceeds, direct 'telling them things' instruction can be increasingly effectively utilised as an additional mode of teaching and learning.



Practical and imaginative play continues to be an important learning process throughout the human lifespan, fuelling creativity not only within the arts, but also underpinning technological and scientific innovation.

"As a 16-year-old boy, Albert Einstein imagined chasing after a beam of light in the vacuum of space. He mused on that vision for years, turning it over in his mind, asking questions about the relation between himself and the beam. Those mental investigations eventually led him to his special theory of relativity"
(Gawrylewski, 2021, p.1).

With Einstein's many decades of playful cogitation in mind, it should be noted here that language is not just a skill we use to communicate with each other; we also rely heavily on our own internal narratives to drive our activities and our growing understanding of them.

Child-directed play stimulates language development not only through social interaction, but also in solitary play which provides the opportunity for children to practise 'self-talk' which, as they mature, increasingly becomes internal, unvoiced cognition.

Children's author A. A. Milne, born long before the advent of modern neuroscience, explained this process at a level that even very young children will be able to grasp:

"When you are a Bear of Very Little Brain, and you Think of Things, you find sometimes that a Thing which seemed very Thingish inside you is quite different when it gets out into the open and has other people looking at it"
(Milne, 1924, p.10).

Self-talk occurs more frequently when children are deeply engaged in play, for a sustained period of time (Test and Cornelius-White, 2013). The depth of immersion experienced of the child engaged in an activity gives rise to behavioural clues as to the activity's pedagogical value. The Leuven child involvement scale (Laevers, 2015) was developed to measure such immersive depth.

Level 1: low activity:' stereotypic, repetitive and passive responses in which little is demanded of the child;

Level 2: frequently interrupted activity:' the child does not pay direct attention for much of the time, being frequently distracted by surrounding events;

Level 3: mainly continuous activity:' the child may seem busy, but there are indications that s/he finds the task routine, possibly carrying on an unrelated simultaneous conversation with others;

Level 4: continuous activity with intense moments:' the child may respond to some interruptions, but will not be wholly distracted, seeking out and resuming the activity again. There are periods of high concentration and focus.

Level 5: sustained intense activity:' the child shows concentration, creativity, energy and persistence, with little response to interruptions. There is a clearly preferred focus upon the activity.

It is only on the two higher levels of the activity that consolidated self-talk is likely to occur, as the child exclusively focuses upon the task. The ability to concentrate gradually increases across the early childhood developmental period, and again, the brain's proliferation and organisation of neuronal pathways is the internal biological process which drives this forwards.

Executive Function and Self-regulation

As human beings move into mid-childhood, the growing coordination of the developing cognitive architecture results in a gradual increase in the ability to focus sustained attention whilst resisting distraction, supporting focused goal directed activity; a skill that is essential in adulthood. The process of controlling the self in this way is termed 'self-regulation.' The underlying neurological structure that allows us to do this is termed 'Executive Function' (EF).

"Executive function is an umbrella term that refers to the following mental processes: working memory or the capacity to hold and manipulate information over short periods of time, inhibitory control or the ability to master and filter thoughts and impulses and to pause and think before acting, and cognitive or mental flexibility such as the ability to shift attention between tasks" (Scorza et al., 2016, p.314).

In a systematic review of EF, Baggetta and Alexander (2016) proposed that EFs most important function is the monitoring and regulation of everyday tasks, through its overarching ability to oversee cognitive, socioemotional and behaviour domains of activity. Strong EF has been linked to the development of cognitive skills that promote academic ability (Espy, 2004) and mitigate against aggressive behaviour (Ellis, Weiss and Lochman, 2009).

EF clearly draws upon increasingly intricate neural connections, and growing linguistic expertise. It rapidly increases in power as the mid-childhood phase begins, when, as outlined above, children have mastered language to the extent that they can fluently and competently use it both to communicate with others, and, most importantly for self-regulation, to reason with the self in internal thought.

Colliver et al. (2022) found in a study of 2213 Australian children, that the more time children spent in unstructured play in the toddler and preschool years, the better their self-regulation abilities were at ages four–five and six–seven years, even after controlling for earlier self-regulation abilities and other known predictors. Their overall results supported the hypothesis that between one and five hours of preschoolers' unstructured active play time significantly predicted self-regulation two years later. In other words, early free play experiences had a delayed, positive impact upon EF.

Where deficits in EF are identified, individuals are at risk in several ways. There is evidence that for adults, EF deficits have been associated with poorer health outcomes (Gray-Burrows et al., 2019) and perceptions of quality of life (Davis et al., 2010). In childhood, individuals with EF deficits are more likely to experience difficulty with literacy and numeracy (Strobach and Karbach, 2021), hence overall academic achievement (Diamond and Ling, 2019). There is also evidence to suggest that EF may moderate children's ability to learn from maths instruction (Ribner, 2020) and the ability to engage with 'mindfulness' self-reflection (Butterfield and Roberts, 2022).

Zelazo and Muller (2002) suggested that EF stretches across a continuum depending on the intellectual and emotional context. 'Cool' EF relates to skills performed in emotionally neutral contexts, while 'hot' EF relates to skills in emotionally charged contexts. However, infants' stress-coping mechanisms can be 'programmed' by adverse childhood experiences (ACES) to trigger at very low levels of stress, causing many ordinary everyday experiences to become emotionally charged, overwhelming EF, thence heavily impacting upon self-regulation (NSCDC, 2004).

Executive Function, Emotion and Self-regulation

Early attachment researcher, Bowlby (1988), theorised that infants' attachment to parents and other regular carers in infanthood was biologically generated, because it is clearly evolutionarily adaptive. Infants who are attached to adults who regularly care for them have a powerful source of protection from danger. He proposed that through their early attachment experiences human beings create an 'Internal Working Model' (IWM) at the subconscious level of their mind, a schema which provides them with a 'blueprint' for how relationships between people work.

In summary, Bowlby posited that positive adult-child relationships create an 'other people are kind and I am lovable' IWM, while troubled adult-child relationships create an 'other people are unkind and I am not lovable' IWM. This is, in practice, not an either/or entity, but a continuum. A small minority of carer-child relationships do sadly become overwhelmingly negative and potentially abusive, which sets up major psychological problems for the child in later life (Boullier and Blair, 2018).

In general, affectionate human relationships inevitably contain complex balances of positive and negative emotion because there are no perfect people, so the majority of human infants therefore develop a few minor insecurities. It is, however, the level of these insecurities that is the key point as children mature; whether they are generally manageable, or overwhelming to the extent that the person frequently struggles to cope, hampered by an IWM that constructs other people as unsupportive, and the self as unworthy of support (Jarvis, 2023).

At the beginning of the twenty-first century, a range of infant cortisol studies discovered abnormally raised levels of the stress hormone cortisol in young children in situations in which they did not feel secure in the care that they were receiving (Jarvis, 2020). Cortisol is a hormone that triggers the 'fight or flight' fear response in the body, not just in human beings, but in all mammalian species. Children's cortisol levels and stress reactions were found to be consistently lower in situations where adults were calm and affectionate, and paid close attention to their communications and needs, and higher where adults paid little, or poorly judged attention to them (Jarvis, 2020).

Our sympathetic nervous system activates the 'fight or flight' response when we feel unsafe or in danger and our parasympathetic nervous system offers a counterbalance to this when the issue that triggered the reaction has been dealt with. It is essentially a mechanism that evolved to trigger a physical response to a stressor, either running from it, or fighting with it. However, contemporary human life is not that simple for either adults or children. In order to recover and calm quickly from stressful situations, children need support from attuned adults to offer solutions to problems where appropriate, assisting parasympathetic nervous system function. Emotion Coaching, a co-regulation strategy, assists this as it offers attunement, empathy, validation and labelling of children's emotions, whilst also setting clear expectations regarding behaviour and problem solving with the child where appropriate (Gilbert, Gus and Rose, 2021).

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Executive Function, Emotion and Self-regulation Continued...

Where infants consistently receive insufficient focused and affectionate interaction with caring adults, their stress reaction system is calibrated to the "high alert" setting. This means that they become highly reactive to situations that put them under even moderate levels of stress. Their EF struggles under an onslaught of stress hormones, causing a failure in self-regulation as the brain is set on a hare trigger to move into 'fight or flight' mode at very minor levels of doubt and uncertainty. Long before the advent of modern neurobiology, developmental psychoanalyst Susan Isaacs described this process through her observation of children's behaviour. "Without security as a background to his life [a child] cannot dare to explore or experiment, to express his feelings or to try out new relations to people" (Isaacs, 1952, p.21).

Correspondingly, later neurobiological research additionally demonstrated that if early attachments to adults are weak, the brain is calibrated to 'emergency survival' mode in infancy, prioritising protection over exploration. This underlines the crucial importance of emotional security and stress reduction throughout early childhood development (Jarvis, 2020).

Brains that are nurtured within environments in which calm, affectionate adults offer safe, playful challenges calibrate infants' stress coping biology and consequent EF cognition to manage within day-to-day human environments. This frees the mind to focus on learning rather than survival (Kestly and Badenoch, 2018). As Cassidy et al. (2013, p.1418) point out, "A growing body of research indicates that differences in the quality of early care contribute to variations in the initial calibration and continued regulation [which]... in turn plays an important role in shaping behavioural responses to threat."

The development of a secure attachment with caregivers in infanthood is one of the most important factors in the promotion of healthy infant development (Rose et al., 2019). Infants whose regular carers playfully communicate that they are both loved and lovable are creating the foundation for robust emotional health, where cognitive functions such as working memory and attentional focus are not habitually overwhelmed with "fight or flight" hormones. Adults can support children through the process of co-regulation (Grimmer and Geens, 2022; Early Years Coalition, 2021).

A range of playful activities support the developing brain. Rose and Wheeler's (2022) review of the literature explored how physical, social, thematic and dramatic play all actively promote the major cortical and subcortical neural circuits that support cognition, emotional regulation and sensorimotor function. In infancy, simple, affectionate carer-child play releases positive neurochemicals such as dopamine and oxytocin which play a key role in enhancing memory, attention, creativity and motivation, nurturing children's brains to develop cognitive flexibility, memory formation and stress regulation (Liu et al., 2017; Rose and Wheeler, 2022). These neurochemicals are also referred to in Chapters 1 and 11.

From the beginning of the fourth year of life, children increasingly engage in collaborative, active free play and associated storying (Jarvis, 2024), and to independent play with objects (Laevers, 2015), essentially engaging in the same process at a higher, increasingly independent level. In this they need teachers and carers to engage with and extend their vocabulary and narratives, building the foundations of knowledge and the linguistic competence they will need to engage in the later stages of learning. They also need adults to skilfully facilitate and safeguard their activities as they move along the characteristically human pathway to emotional and intellectual self-regulation.

'Schooling' and direct instruction is of course necessary across mid-childhood and adolescence, communicating a body of cultural knowledge to the next generation. But both solitary and collective play activity remains a crucial, lifelong mode of learning, building neuronal connections through hands on experiences and 'what if...' contemplations.

"We contend that it is only the recognition of the need for flexible, authentic and collaborative play-based and open 'discovery' learning activities that will help us to create a modern developmental environment that can holistically nurture children's socio-cognitive capacity" (Jarvis, Newman and Swinarski, 2014, p.63).

Chapter 4: Quality Play

> *Research shows that effective high-quality experiences in the early years will have a significant positive impact on children's development, their progress through school and on into adult life.*
>
> *(Early Years Coalition, 2021)*

Introduction

Play is a fundamental aspect of early childhood, recognised not only for its joy and spontaneity but also for its significant role in child development. However, in many educational frameworks, play is increasingly marginalised in favour of formalised school readiness agendas. Play has been constructed in early childhood practice and academic research as important and yet still fails to convince those who create policy and curriculum of its value (Thompson, 2024). It can also prove problematic to define with a singular definition due its complex nature and whilst this should be celebrated, it can confound those creating policy where it appears to be a requirement to have data only to measure efficiency and quality. This chapter begins with an exploration of the position of play in our society and moves on to set the context of how perspectives on quality influence the role of play. The next consideration is how play might be defined from a quality perspective, and the integral role of adults and the home environment. The exploration of the adult role contends that for quality practice in settings the adult must not only have a deep theoretical understanding of play but be a strong advocate for quality play (Thompson, 2012; 2018).

The Position of Play

The United Nations Convention on the Rights of the Child (UNCRC) (UNICEF, 1989) establishes play as a fundamental right of every child. Article 31 states that every child has the right to rest, leisure, and play. Despite this, play is often undervalued in education systems, overshadowed by measurable academic outcomes and a formalised school readiness agenda, that prioritise structured learning over exploratory play (Roberts-Holmes, 2018).

Early childhood professionals and policymakers must advocate for play as an essential component of learning rather than an activity to fill time. Play, amongst many attributes, fosters creativity, problem-solving, and emotional resilience, all of which contribute to a child's overall wellbeing. As a society we need to consider what we want for our young children. There is a choice. Of course, parents and families want their children to be successful but most of all happy. Laevers (2005) emphasises that high levels of wellbeing are crucial for effective learning, further reinforcing the necessity of play in early childhood education. Are children and parents to be constantly berated for not being ready for school when actually policy makers and school leadership lack understanding of the needs as a young child? If those working with our youngest children do not understand their play, then that should not automatically be considered the fault of the family and the child.

Case Study

The reception children have been allowed outside for a period of time having been inside for over an hour. They have been sat on the carpet for 20 minutes in an adult directed activity and then assigned tasks all of which involve sitting on a chair at a table. Three boys are constantly reminded of the need to sit still on the carpet and then asked to stop fidgeting on their chairs whilst trying to engage with a writing activity. As soon as outdoors is mentioned the boys bolt to the door, putting on their coats independently and excitedly discussing what they are going to do. They are asked to be quiet at this point.

Outside the female teacher stands near the door looking cold and does not engage with the children stating it is important for them to have some free play time. The boys develop an adventure game based on a recent children's television programme which involves climbing up high, running round all of the equipment several times and creating a safe space that is covered over with sheets that they can hide from the wild animals on the island. The boys are constantly reminded to be careful, not to climb too high and to make sure they don't bump into anyone or hide somewhere where they can't be seen.

Reflection

What is the practitioner missing about the quality of play happening here e.g. funds of knowledge, interactions, language, storytelling?
What understanding is there of the benefits of risky pay?
Should the practitioner consider their own perspectives on gender and play?
Is there a safeguarding issue or should children be allowed private spaces in their play? Why?

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Perspectives on Quality

The concept of quality in early childhood education and care (ECEC) is widely debated (Campbell-Barr and Leeson, 2016). Definitions of quality should be tied to the child's needs and outcomes. Some scholars argue that quality must be contextual (Urban, 2017) rather than a universal standard.

While the discourse on quality is extensive, discussions on a quality curriculum remain limited (Wood and Hedges, 2016). Campbell-Barr et al. (2023) suggest that a high-quality curriculum should be:

- Contextual – considering the child's background
- Emergent – responding to children's needs and interests
- Expressive – fostering autonomy and self-expression

This perspective aligns well with the inclusion of play as pedagogy and distinguishes early childhood curricula from other educational stages.

The debate on curricula extends to its political and cultural underpinnings. McNaughton (2005) highlights the link between power, knowledge, and politics in curriculum design. She cites Silin's (1995) argument for a curriculum that reflects children's lived experiences rather than conforming to predetermined developmental milestones.

In many regions, including the UK, developmentalism and school readiness dominate curricula. The EYFS (DfE, 2024) acknowledges play but simultaneously emphasises adult-guided learning, reinforcing a structure where play is secondary to direct instruction. This contradiction can lead early childhood professionals to perceive play as less valuable than explicit teaching. In contrast, Te Whāriki (Ministry of Education, 2017), the New Zealand early childhood curriculum, unequivocally values spontaneous play as meaningful learning, without undermining it with contradictory guidelines.

Defining Quality Play

Quality play is difficult to quantify for some as it does not produce immediate, standardised results. However, effective and engaging play environments require skilled early childhood professionals who have a deep understanding of child development and can observe and interact with a deep theoretical perspective embedded. Looking to pioneers such as Froebel (2001), policymakers can develop an understanding that children benefit most when they have autonomy over their play, supported by sensitive interactions from early childhood professionals. This contrasts with external quality measures that emphasise academic performance over meaningful play experiences.

Defining Quality Play continued....

Play is integral to children's holistic development. However, policy-driven datafication and schoolification (Roberts-Holmes, 2018) threaten the time and space required for quality play. Laevers (2005) emphasises that children need high levels of wellbeing to learn effectively, yet, as previously suggested, play is difficult to quantify, making it a challenge to defend against outcome-driven educational policies.

While play can often be dismissed as a passive activity, it is a vital mechanism for young children's learning and wellbeing. Political rhetoric frequently prioritises measurable academic outcomes over the holistic needs of children, pushing them towards structured education rather than allowing time for meaningful, slow pedagogical practice that fosters a deep level of learning (Bruce, 2023; Clark, 2022; Laevers, 2005). Knowledgeable early childhood professionals understand that rigid targets do not address the full spectrum of skills children need to become future citizens in an ever-changing world. These early childhood professionals need to be supported to be advocates for play with accessible training and knowledgeable training providers.

Training and Play Quality

Froebelian practice underscores the importance of children having autonomy over their play. With appropriate scaffolding and sensitive adult interactions, play fosters a comprehensive range of developmental outcomes. However, early childhood professionals must possess the expertise required to support and enrich children's play effectively. This is a highly skilled and sophisticated role and currently an area that is missing from training and education for early childhood professionals.

Current external quality measures emphasise academic performance over quality play provision, reinforcing the misconception that schooling is more important than play. More emphasis is needed on embedding play and pedagogy into childhood education qualifications (Albin-Clark and Archer, 2023). A cultural shift in training and policy could elevate the status of play within early childhood education. Despite its importance, play pedagogy is often underdeveloped in professional training. In the UK, apprenticeship models emphasize peer-led learning, which can perpetuate misunderstandings about play's role in child development. High-quality training from Level 2 onwards should ensure that early childhood professionals grasp play as a vehicle for learning, rather than a secondary activity.

Misunderstandings about play persist at various levels, from policy makers to early childhood professionals. Those responsible for training early childhood professionals must have a deep understanding of play pedagogy. It is unacceptable for early years teacher training to lack a strong emphasis on play, as effective interactions between children and adults require critical, creative, and engaging approaches. Play is also a social justice issue (Albin-Clark and Archer, 2023). Positioning play as an inclusive right ensures that all children, regardless of background, can engage meaningfully. To achieve this, early childhood professionals must fully understand and advocate for its value.

The Home Environment

Recognising the home as a crucial site for play reframes traditional notions of learning environments. Parents act as play partners, shaping children's experiences and fostering engagement. Equity, diversity, and inclusion must be considered when acknowledging the varied ways play emerges in different home contexts.

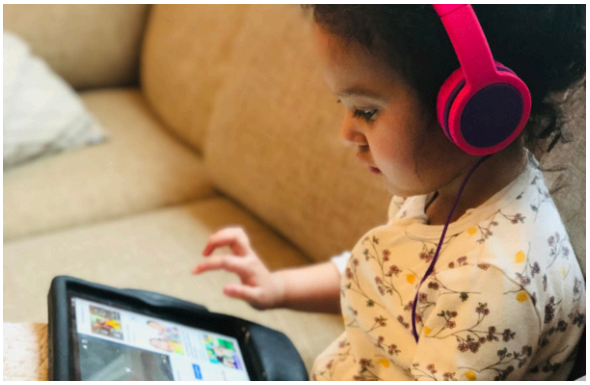
The role of adults in play is often questioned. Fisher (2016) suggests a consideration of whether adults are interacting or interfering and the nuances involved. The suggestion that early childhood professionals should enable rather than control play is one that parents are often very skilled at engaging with. Knowing their child well enables parents to respond in the moment because their relationships and knowledge of the child enable to do this. This suggests that conversations between family and setting or school are essential in understanding how children like to play and their dispositions to learn (Carr and Claxton, 2002).

Research over the past two decades has increasingly focused on how technology has influenced children's play and relationships with play (Thompson, 2024). Marsh et al., (2020) consider how digital play has increased in children's home environments as part of their play repertoire and that rather than demonising this aspect, early childhood professionals have a role to play in harnessing this to support in particular problem solving and literacy skills amongst many other benefits (Tatham-Fashanu, 2024). An acceptance that children arrive in settings with a repertoire of 'cognitive and cultural resources' (Moll et al., 1992, p.134). Rather than perceiving digital play as 'good' or 'bad' Tatham-Fashanu (2024, p.303) explores theories around 'connected' play and 'converged' play in a consideration of how traditional types of play and digital play work together to enhance children's experiences, development and learning.

Quality play is a right, not a privilege. However, societal structures, educational policies, and inadequate training often marginalise play in early childhood education. A meaningful shift towards play requires well-informed pedagogues, inclusive curricula, and policy changes that prioritise children's holistic development over standardised assessments.

As play remains a contested space, advocating for its value is essential. Early childhood professionals, policy makers and parents must collaborate to preserve and enhance play's role in children's lives, ensuring they experience the joy, freedom, and developmental benefits that quality play provides.

Chapter 5: Play and Technology



> *Young children experience their world as an environment of relationships, and these relationships affect virtually all aspects of their development*
>
> *(National Scientific Council on the Developing Child, 2004)*

Introduction

There is not an aspect of our lives that has not been altered by advances in technology. It is now so much a part of our everyday experience that it is easy to forget that home computers only became common in the 1980's, smart phones, as we know them today, have only existed since 2007 and the first touch screen tablets were not released until 2010. Technology has not only changed the way many adults work and interact, but also the way that many children play. Since technology became common within the home, a range of devices and apps have been developed with the express purpose of supporting play and playful learning. These include Switch, Nintendo, Wii and many more familiar names. Ofcom (2024) report that 23% of children aged three and four are now playing online games, a worrying trend as regulation remains limited.

Research continues to emerge into the potential harm excessive screen time can have on young children. It has been linked to changes in the way developing brains process information and their ability to maintain focused attention (Taylor, 2012), to a decline in children's ability to self-regulate (Radesky, Schumacher and Zuckerman, 2015), and increases in aggressive or challenging behaviour (Christakis, 2020). However, we must remember that the debate about the use of technology with young children extends beyond screen time and, as Siraj-Blatchford and Siraj (2002) pointed out, while technology may have limited utility in helping children develop theories of mind, it can have a valuable educational role when used to support and enhance children's play.

Playing with Screens

Effective early childhood professionals are able to use a range of tools to support learning and development, to promote engagement and help children learn to assess and manage risk. We want to develop children's imagination and curiosity, encourage perseverance, collaboration and the ability to keep themselves safe in all parts of the world; including the digital world. If we are to help children engage with the world around them and develop skills that will take them through into later childhood and beyond, all forms of technology, including screens, must be part of our toolkit.

If we approach the use of digital tools from a playful perspective, in the same way we approach any other tool we might use with children, we have a good starting point for developing an understanding of how they can be incorporated in play. Tablets and other similar devices can be used to watch videos, find facts, take photographs and make mini movies with friends. Taking time to find the right tool and practise using it before introducing it to children is essential.

Playing with Screens continued....

Play begins at home and early childhood professionals can draw on research which has investigated how touchscreen devices can support communication and language (Booton, Hodgkiss and Murphy, 2021), and creativity (Booton, Kolancali and Murphy, 2023) in the home to promote reflection on their use within settings. Both studies highlight that these tools should be used as part of an interaction between adult and child rather than as something children access independently.

Playing alongside the child, especially as they develop the skills necessary to use digital equipment, is crucial, enabling early childhood professionals to model how we use devices safely and the language around their use. For example, if a child has picked up a digital camera and wants to capture their friends 'at play' it is important to model asking for consent and avoiding putting a flash directly into someone's eyes. There are also opportunities for children to play alongside each other, or even collaborate using some of these tools, if for example a child has experience of using it before, they might be able to act as the more knowledgeable other, demonstrating how to use the tech. Once movies have been made, children might set up a cinema, inviting others to watch the film, selling tickets and maybe even snacks as part of a rich role play scenario. In another setting, a child was observed using a tablet to take pictures of children riding bikes outside. When asked what he could see, he explained that he was a police officer, and he was doing speed checks. The adult was then able to show how the time stamp could be added and the child continued to take photos, issuing speeding tickets to anyone deemed to be riding too fast!

Playing through Apps

While devices can be purchased with cameras and simple software preinstalled, many rely on apps. When using an app with a child, it is essential to check your internet, device and app settings before you begin playing. You can find lots of helpful advice about how to get started at: https://www.internetmatters.org/.

Booton, Kolancali and Murphy (2023) suggest that the best apps are those which are open ended and have been designed with a particular area of learning in mind. Their study highlighted that these types of apps are better able to support creative, critical thinking. They recommend using independent reviews such as Common-Sense Media, to identify apps that may support the child's needs and interests. Booton, Kolancali and Murphy (2023) also emphasise the importance of the adult trialling the app themselves to assess its efficacy before introducing it to the child. This enables us to better support the child as they explore the app, making effective use of questioning to support problem solving, encourage children to articulate their ideas and assess their technological capability.

Of course, there is more to technology than screens or digital devices. There is an abundance of technology that has been designed specifically to support play and enhance learning.

Unplugged Technology

Educational robots like 'BeeBots' provide a meaningful play opportunity in which computational thinking and basic coding skills are developed (Zurnaci and Turan, 2024). BeeBots and other similar toys also provide meaningful opportunities to develop positional and directional vocabulary through play.

Unplugged technology (non-operational or disconnected technology such as old computer keyboards, mobile phones etc) can also be meaningfully incorporated in children's play within an early years environment. MacKley (2022) suggests encouraging children to 'tinker' with unplugged technology, using screwdrivers and other tools to see what is inside, promoting interest in technology. Technology is now so much a part of our everyday lives that defunct technology can also be a useful addition to role play where children may use phones, tablets or computers when playing homes, doctors or any number of roles.

Taking technology outside

In an era dominated by digital screens, many parents are seeking provision which offers real world learning experiences and demand for Forest School places is increasing significantly in the post pandemic era (Knight, 2023). Forest Schools offer a refreshing approach to early childhood education that emphasises hands-on, experiential learning in natural settings. The incorporation of technology in Forest Schools is a topic of ongoing debate. Critics worry that technology might detract from the immersive nature experience that is central to the philosophy of Forest Schools, while advocates argue that when used appropriately, digital tools can enhance outdoor learning experiences.

Research indicates that the perceived dichotomy between technology and outdoor activities is not necessarily accurate (Garden, 2022). Digital tools like tablets and cameras can be used to document and extend learning experiences, supporting activities such as wildlife tracking and botanical studies. Such uses of technology can offer an enriching extension to traditional outdoor education, but effective integration of technology in Forest Schools requires a balanced approach, ensuring that technological tools enhance rather than overshadow the natural learning experience.

With this in mind, there could be a use of torches in Forest School settings which represents a unique intersection between tool-based learning and sensory exploration. The contrast between light and shadow in forest settings creates unique learning opportunities that engage multiple senses simultaneously, supporting visual perception and spatial awareness, while stimulating cognitive development (Williams and Thompson, 2024). Ardoin et al. (2020) have also observed that the use of torches in forest environments can increase self-confidence when navigating dark places, promote cooperative play and communication through shared exploration. Indeed, Reed and Smith (2021, p.125), who conducted research across 15 UK Forest Schools noted that "structured torch play activities increased engagement by 67% during darker afternoon sessions." In addition to using torches to navigate dark places, examples of torch play might include shadow puppet theatres using native wildlife themes, storytelling circles or winter wildlife tracking games (Forest School Association, 2024).

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Even in the confines of a setting garden, torches are an invaluable play resource as described in the case study below:

Case Study

I was working in a nursery setting with a great outdoor area with a real Forest School feel. The mud kitchen area had wood bark on the ground, cut tree stumps with numerals carved on from 0 to 10, bug hotels, bird feeders, herb and vegetable boxes. When it was dark there was very little light, apart from a lamp post light, some hanging lights around the fence and the light from the classroom. This was a perfect environment for torches.

We purchased some torches from a local supermarket in four different colours. We would go into our nursery garden and explore the environment in relative darkness. Children would point the torches at the leaves on the trees and watch them illuminate, we would also go into the mud kitchen area and look for snails, worms and creepy and any crawlies lurking about. The children would shine the torches on the floor and wave them around watching the light bouncing off the floor dancing around like fairies.

The torches transformed the outdoor area into a completely new language rich multi-sensory environment which supported curiosity and communication.

Playing with Technology

While no means a comprehensive guide to using technology to enhance play in early years settings, this chapter acknowledges that technology is an essential part of children's everyday experience of the world and offers suggestions for how early childhood professionals might meaningfully incorporate technology to support and enhance children's play. Our key message is that we cannot ignore the impact technology has had on our world and nor should we. Instead, we must seek ways to play with technology that enable children to develop the skills and dispositions they will need to navigate the digital world, and to know how to use it responsibly in their everyday lives. The best way to do this, is through play!

Chapter 6: Play and Special Educational Needs and Disabilities

> *Be patient, listen and enjoy spending time and learning together*
>
> *(UNICEF, n.d).*

The Importance of Play in Early Childhood for Children with Special Educational Needs and Disabilities (SEND)

As we have seen, the importance of play for all children should not be underestimated. It is not 'just play'; it is an essential aspect of early childhood that helps children develop socially, emotionally, cognitively and physically. Play allows children to explore the world around them, develop their communication skills, learn how to make friends and relate to others. Yet there is often increasing pressure to ensure children are 'school ready' and 'meeting their targets'. This pressure can sometimes cause us to lose sight of the importance of play, leading to a creeping formalisation in our practices. If you are struggling to persuade or influence senior leaders about the importance of play or are just looking for ideas, this section will certainly help.

Play becomes even more crucial when a child has SEND. Play enables children with additional needs to navigate their unique challenges. They may play in different or unexplored ways and should be allowed the freedom to decide how and what to play with. As early childhood professionals, we should embrace, value, and encourage children's unique play skills and preferences. We should be curious about the different ways children play and not be dubious about play that we do not necessarily understand. For example, we must allow children to engage in play activities they enjoy, even if they differ from typical play norms, such as, allowing a child to hear the same song over and over. From a practical standpoint, this involves concentrating on "what children do and what it means to them" rather than simply observing the external aspects of play and how they seem inadequate compared to neurotypical developmental frameworks (Conn, 2015).

More and more, we are encountering children with SEND in our mainstream educational settings. These children may need adaptations and support, but it is important that their play remains freely chosen, personally directed, and intrinsically motivated. These children have a vital need for play. It is their principal outlet for communicating feelings, interests, and identities. Play belongs to the individual child, and, as adults we shouldn't place our own expectations and agendas on their play. For example, for a child with a visual impairment, a hand-over-hand approach may be appropriate. In this way, a practitioner can guide the child to the play opportunity, but the child has control and can decide when to end the activity by withdrawing their hand.

Understanding SEND children's play as part of a neurodiverse play culture is crucial for describing its unique qualities without judgement (Harding, 2021). We must avoid referring to SEND play styles as 'deficient' or 'lacking'. Instead, we should focus on describing their distinct qualities without judgement. Using deficit-based language creates negative perceptions of SEND by emphasising what is 'wrong' whilst adopting a strengths-based approach empowers children (Early Years Coalition, 2021).

Implications for Practice

Cognitive Development:

- Through play, children with SEND develop critical thinking, problem-solving skills, and creativity. Play enhances language skills such as vocabulary development, sentence structure, and communication skills.
- Play supports sorting and categorisation skills, for example, by providing a range of building materials, which can be tailored to children with SEND by using larger, more tactile materials or adaptive tools for children with motor difficulties.

Social and Emotional Development:

- Play provides opportunities to practice essential social skills, helping prevent social isolation or difficulties forming relationships. Play supports emotional regulation by providing a space for children to express and understand their emotions and can be therapeutic, helping them process complex feelings and build emotional resilience.
- Sensory activities can be calming and support children in regulating their emotions through tactile experiences.

Motor Skills and Physical Development:

- Physical play helps improve coordination, balance, and dexterity. Activities such as cutting with scissors, drawing, and threading beads help develop fine motor skills. Manipulative play (e.g., playdough, clay) strengthens hand-eye coordination and dexterity, helping children improve their grip, control, and muscle strength.
- Movement activities develop coordination, balance, and rhythm. The level of challenge can be adjusted according to each child's abilities to ensure all children can participate.

Executive Functioning and Independence:

- Memory games help children focus on details and practise their memory skills and can easily be adapted to meet specific needs. Games with multi-step instructions are excellent for focus skills, you can simplify instructions using visuals or gestures if necessary.

Self-Expression and Identity:

- Play offers children the opportunity to experiment with different roles and scenarios, helping them explore their sense of self and identity, thus developing a positive sense of autonomy and confidence.
- Through drawing, painting, or modelling, children can express their thoughts, feelings, and ideas. By providing open-ended art materials, children can choose colours, shapes, and items that reflect their interests and feelings.

Increased Stress and Frustration:

- Children denied the chance to play in their chosen way may become anxious and frustrated, especially if subjected to overly structured or academic-focused environments. Play offers respite from academic work and gives children a chance to engage in less structured, more enjoyable activities. Denying them this outlet could lead to heightened anxiety and inhibit their ability to self-regulate.
- Play is beneficial for wellbeing and can help reduce stress, supporting children in learning to regulate their emotions.

The Play Environment

The play environment is considered as key in much of the research focusing on play and children with additional needs. Pretend play interactions of children with SEND in mainstream environments can support in many ways around responsive teaching programmes, including verbal and physical cues. These cues, and their contribution to the social and emotional environment, have been observed to promote children with SEND agency during play, particularly in their home environments (Nind, Flewitt and Payler, 2010). Research carried out by Bulgarelli (2020) showcased the need to develop play-based programmes that facilitate and support the play of children with SEND. Their restricted access to enjoying play on an equal basis with their peers is something that Play Matters hopes to contribute to tackling.

For children with SEND, play is not just a fun activity but a vital component of their developmental journey. It facilitates the development of essential skills across multiple domains, including cognition, language, social interaction, motor skills, and emotional regulation. Denying them sufficient time to play can significantly hinder their growth, leading to long-term developmental challenges. It's essential to create environments that allow ample opportunities for play, as it is crucial for their overall wellbeing and development. In the Early Years Foundation Stage (EYFS) framework, play is considered a fundamental way for children to learn and develop. Build on these ideas and add your own as you go so that you can always be confident when explaining to others why children are engaged in these activities and how they support their learning and development.

Case Study

Katerina is a three-year-old girl diagnosed with a profound and multiple learning disability (PMLD). She has significant difficulties in communication, mobility, and cognitive development. Katerina also has sensory impairments and complex health needs, requiring high levels of support in her daily life. Here we describe Katerina's learning experience through the multi-sensory approach of storytelling using the book: The Gruffalo.

Soft toys are used to introduce all the characters and textured leaves are presented to Katerina. Katerina is given an opportunity to touch the soft toys and textured leaves. The teacher uses sound effects, such as an owl hooting, to enhance the experience, and Katerina is taken outdoors to a wooded area to feel completely immersed in the story - this is where the storytelling continues. Katerina is encouraged to choose which animal the Gruffalo meets next, and this helps her to communicate her choices using gestures or even sounds. A play tray is set up after the reading of the story for Katerina to explore further.

Katerina is fully engaged throughout the learning process and has begun to make intentional gestures or sounds to indicate her preferences, this may even allow her to understand the nuances of cause and effect. She smiles and laughs when introduced to the characters and shows real interest when exploring the textures of the leaves, Katerina also tries to mimic the owl hooting, further reinforcing communication and social interaction. Most importantly, Katerina builds a stronger emotional connection with her teacher and the positive interactions help build trust and understanding.

Multi-sensory learning is a truly inclusive and playful approach. The benefits to children with special educational needs reach far beyond increased engagement and motivation, and the techniques benefit all students, not only those with learning differences. The work of Bremner, Lewkowicz and Spence (2012) tells us that a multi-sensory approach can not only enrich learning, but it can also boost cognitive function. Activities such as sensory bins, messy play trays, and tracing letters in the sand, can help improve both gross and fine motor skills. Water and ice play could be an opportunity for children to learn about volume and states of matter, whilst popping peas from a pod and counting them not only facilitates the learning of number but also brings about tactile and olfactory joy. Another benefit of a multi-sensory approach is that often these activities require children to communicate and interact with their peers, this in turn can lead to enhanced language and social skills.

Murphy (2022, p.91) points out that "most educators are aware of the five senses of touch, sight, hearing, tasting and smelling, but the sensory system is much more complex, and also includes proprioception (balance) and vestibular sense (intuition)." As early childhood professionals we also need to nurture children's proprioceptive sense and vestibular system through multi-sensory learning and consider the implications for children for who may have sensory processing differences and difficulties. Gascoyne (2011) suggests we carefully observe our children and aim for a personalised 'sensory diet' for each child.

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The Voice of Early Childhood

THE VOICE OF EARLY CHILDHOOD

SCAN ME

Early years settings can allow for truly exploratory approaches. Remain mindful that some SEND children may become overwhelmed by sensory stimulation, however, learning spaces, both indoor and outdoor; filled with colour and visual stimulation and sounds, provide exciting places for children to learn. The early years are a perfect environment to nurture a love of learning. One way to do this is through multi-sensory storytelling - a method of total immersion in a story which can support curriculum access, learning, and socialisation across different subjects and activities (Preece and Zhao, 2015). For example, a story about the Very Hungry Caterpillar could involve students touching a furry toy caterpillar or even observing a real one. Children could taste and explore the different items of fruit, and they could have fun making munching or crunching sounds - there is even an opportunity there for the little ones to learn about onomatopoeia! Stories that are told in this way, really do come to life, allowing time for students to interact with the stories in creative, playful, and multifaceted ways.

Top tips:

- Use a multisensory approach to capture the attention of autistic children and children with emergent signs of attention deficit hyperactivity disorder (ADHD). Tailoring multi-sensory activities to explore themes of those children's focused interests/hyper fixations, will further increase engagement.
- Children with PMLD will greatly benefit from all multi-sensory experiences but some may need support to access them. Guide hands and bring the activities to them. Remember to be responsive in your approach and observe carefully so that you are mindful and sensitive to what the child wants.

Reflection

To what extent do we understand our children's sensory needs?
How can we develop a multisensory approach tailored to our children?
Do we have spaces children can use as a safe haven or calm area if they feel overwhelmed?

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Chapter 7: Physical Development, Outdoor Learning and Play

> *Physical activity is vital in children's all-round development, enabling them to pursue happy, healthy and active lives.*
> *(DfE, 2024, p.10)*

Introduction

Play is vital for ensuring physical health and healthy development and has many physical benefits. It helps children develop in areas that are widely applicable to their later education, such as building core strength and self-regulation skills. Physical play allows children to rehearse many of the skills and attitudes that they need to develop as they grow older. Ensuring that children engage in physically active play is essential for the healthy growth of both body and brain.

Play and Physical Health/Development

From infancy, play is a natural way for children to explore and understand their world. Even the simplest forms of physical play help in developing essential movement skills and physical strength. It is important for early childhood professionals in the early years to be aware of the following evidence about the role of play in healthy physical development:

- Babies engage with their environment through play, interacting with objects in short bursts of activity. Every object becomes a potential plaything, fostering curiosity and motor skill development (Herzberg et al., 2021);
- Physical actions and movements are deeply embedded in childhood culture, serving as an intrinsic part of early development (Bruner, 1983);
- Physical play, the earliest and most common form of play, is linked to academic progress, self-regulation, and social competence (Whitebread et al., 2017);
- Active play experiences in early childhood shape attitudes toward physical activity in later life, influencing long-term health behaviours (Vinci et al., 2023);
- Early childhood is critical for developing healthy physical activity patterns. Sedentary behaviours and sleep habits established at a young age can persist into adolescence and adulthood (Janz et al., 2005);
- Research links the age a child begins walking to bone strength in adulthood. Late walkers may have weaker bones later in life, particularly in men (Ireland et al., 2017).

In addition, the World Health Organisation (WHO, 2019) recommends that:

- Babies under one year old should be physically active, particularly through interactive floor-based play, including at least 30 minutes of tummy time spread throughout the day;
- Children aged one to two years should engage in at least 180 minutes of physical activity daily and avoid being restrained for more than 60 minutes at a time;
- Children aged three to four years should have at least 180 minutes of physical activity, with at least 60 minutes at moderate to vigorous intensity.

Outdoor Play and the Natural World

Outdoor play provides unique benefits that contribute to both physical and mental health. Engaging with nature fosters joy, resilience, and social development while offering varied physical challenges. Researchers have found many positive benefits to playing outdoors and early childhood professionals can use these varied findings to advocate for more outdoor play in their settings:

- Outdoor play promotes eye health, reduces myopia, and helps prevent adult illnesses (NI Direct, ND; Kiviranta et al., 2023);
- Natural environments encourage diverse types of play. Children often report feeling a sense of joy and wellbeing when playing outdoors (Prins et al., 2022);
- Outdoor play supports children in pushing their physical limits, promoting social and emotional resilience (McCree et al., 2018);
- The abundance of loose parts in natural play areas stimulates creative and symbolic play (McCree et al., 2018; Kiviranta et al., 2023);
- The attitudes of early childhood professionals significantly influence children's outdoor play experiences, with weather conditions often acting as a barrier (Kiviranta et al., 2023);
- Outdoor play enhances confidence, independence, communication, and decision-making skills (Kiviranta et al., 2023);
- Engaging in risky play, such as climbing, swinging, and balancing, allows children to assess risks, develop self-regulation, and test their abilities. Adults tend to be more comfortable with risky play outdoors than indoors (Spencer et al., 2021);
- Clearly defined outdoor play areas provide children with a sense of freedom while ensuring their safety (Cerino, 2021).

Play, Physical Development, and Educational Outcomes

Physical activity and play are strongly correlated with positive educational and behavioural outcomes. Active play supports cognitive development, motor skills, and emotional wellbeing. Again, when making the case for physical activity and play being prioritised in early years settings, these key benefits for long-term educational outcomes provide clear evidence for this:

- Spending more time outdoors is linked to lower inattention-hyperactivity symptoms and improved cognitive-behavioural development (Ulset et al., 2017);
- Active play builds confidence, enhances gross motor skills, and encourages safe risk-taking (DfE, 2024);
- Play fosters a sense of achievement, boosts self-esteem, and contributes to autonomy (Early Years Coalition, 2021);
- Rough-and-tumble play is particularly beneficial for boys, promoting social competence and emotional awareness (Whitebread et al., 2017;.
- Group games and child-led play teach cooperation, turn-taking, and social communication (DfE, 2024);
- Establishing boundaries in physical play creates a secure environment while allowing children to challenge their physical limits. These boundaries support self-regulation and respect for personal space (DfE, 2024);
- Structured play with rules, such as waiting turns and sharing, helps children develop emotional and physical self-regulation (Braund and Timmons, 2021);
- Setting play boundaries fosters teamwork and teaches cause-and-effect relationships, reinforcing shared limits (DfE, 2024).

Motor Skills and Play

Gross and fine motor skills are crucial in early learning. While fine motor skills, such as handwriting, receive considerable attention in schools, gross motor control is fundamental to developing fine motor abilities, and it is important to understand that the body gains control from the core outward (Bradbury and Swailes, 2024). Activities like climbing, crawling, running, spinning and navigating obstacle courses help develop proprioception (awareness of body position) which, along with balance, are essential for the development of writing skills.

In England, there is a strong focus on the tripod grip as an early learning goal. However, this grip can be challenging for some children due to their stage of bone development. Bones continue forming until age 19 through ossification, a process in which hormones transform cartilage into bone. Play activities that promote core strength, and consequently help with motor control, include riding bikes and trikes, crab walking, gardening, and swinging. Core strength and coordination are fundamental to a child's ability to control movement and develop fine motor skills, which are essential for writing and other academic tasks (DfE, 2024).

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Case Study: Outdoor Play and Physical Development in a Setting without an Outdoor Area: Peckham Nursery (The Old Station Nursery Group)

How are daily walks managed?

All the children (babies, toddlers and preschool) go on walks to the local community twice a day, once in the morning and once in the afternoon. This is planned in advance to ensure there are enough staff on the walk/in the setting.
Walks are varied and where possible linked to children's interests, what is going on in the local area, the time of year and the weather – e.g. the local parks, libraries or shops.
An outing form is filled out by staff before every walk, including the names of children and staff which is signed by the manager/deputy manager. A risk assessment is done and the nursery's mobile phone is taken with staff on the walk. Children wear high visibility jackets and staff have a Paediatric First Aid qualification.

Peckham Nursery
What links have you developed with the local community?
We have several links to the community including shops, parks, libraries, market/town centre and the train station. Children learn to be aware of things going on around them and in their local community. They have a deep connection to their local community and daily walks benefit their understanding of the world, reinforce British values and enhance cultural capital.
How you ensure children get daily opportunities for physical exercise/large-scale play experiences?

In addition to walks, children get an opportunity for physical exercise through:

- Music and dance – children are encouraged to move freely and have fun
- Indoor climbing frame – children play and gain confidence in large motor skills
- Cooking activities – children have regular opportunities to cook and create
- Arts – with an emphasis on large scale experiences, as well as playdough and clay
- Sensory resources – natural resources within the nursery
- Sporting activities – led twice a week by an external group to build children's physical skills and core strength.

What are the pros and cons of not having a garden/outdoor area?
Pros include children having the opportunity of going out of the nursery and familiarising themselves with the local environment, engaging in physical activities and enhancing their knowledge of the world. They have the opportunity to visit local libraries and shops and have a close connection with the community.
Aside from not having a dedicated outdoor space to use throughout the day, the main con is having to stop what we are doing to ensure that the children go for a walk and the time it takes getting children ready for the walks each time, especially for babies.

Reflection

Physically active play is not only essential for physical and mental health and healthy development, it is also linked to the development of numerous skills, attitudes and aptitudes that support a child's wider education and learning. Prioritising the role of physically active play in the early years leads to better outcomes in education and in later life.
How can you better promote physically active play in your setting?

Key Points to Consider

- You may need to encourage staff to see the benefits of outdoor play to overcome this barrier.
- The EYFS supports care, learning and development – physical play is a key part of this. Ofsted's focus on cognitive development may discourage settings from allocating time to physical play.
- It is still possible to create an environment for physical play, even if you do not have an outdoor space.

Chapter 8: Play in the Early Years Curriculum

> *"Play is self-healing in most situations and brings an intellectual life that is self-aware, connected to others, community and the world beyond.*
>
> *(Bruce, 2023)*

Introduction

In the past play and learning have been seen as two separate entities (Hirsh-Pasek and Golinkoff, 2008) however in more recent times it is recognised that the two aspects are commensurate, and playful learning is a more appropriate turn of phrase. The words curriculum and play frequently present oppositional concepts – play being considered as spontaneous, a reward, unstructured, free, liberating, therapeutic; whereas curriculum brings about words such as structured, didactic, measurable, outcomes, adult directed. In this chapter, we discuss why play should be seen as a learning tool and the curriculum should be seen as malleable. This will be discussed further as this section progresses.

It is OK to Play

The role of play in the Early Years curriculum really should not be contentious. The statutory guidance for the EYFS (DfE, 2024, p.17), which underpins practice in all settings in England, states:

"Play is essential for children's development, building their confidence as they learn to explore, relate to others, set their own goals and solve problems. Children learn by leading their own play and by taking part in play which is guided by adults".

The child's right to play is enshrined in the United Nations Convention on the rights of the child, which the UK signed up to in 1989 (UNICEF, 1989). Yet changes to the focus in Ofsted inspections seem to have led to increasingly prescriptive curricula which either sideline play, or do not seem to value play for its own sake. The notion that children's hands and bodies can be active without any activity in the mind is somewhat problematic, given all movement requires the brain to function. Statements such as these, are very powerful, potentially extremely damaging and go against current neuroscientific understanding. Porges (2022, p.22) defines play as a: "neural exercise that enhances the co-regulation of physiological state to promote the neural mechanisms involved in supporting physical and mental health."

This is the case not just within the United Kingdom, but also internationally. Madeeha Aqeel Khan, an Early Years Section Head from The Metropolitan Academy in Karachi: Pakistan, tells us how play and learning are slowly integrating within the society in which she operates:
"In Pakistan, where traditional educational practices are prevalent, the shift towards creating a playful environment is gaining momentum. As an Early Years Educator in Karachi, a city with mixed cultural values, I have witnessed few challenges of implementing play-based learning in a culturally diverse setting, as parents still believe in traditional teaching methods from early years. By educating parents and early childhood professionals about the benefits of a playful environment through orientation sessions, we can work together to create a more supportive and inclusive learning community."

More than ever before, early childhood professionals are having to fight for the child's right to play, to know that it is ok to play and to do this they need to be equipped with the knowledge and skills to facilitate a playful curriculum.

Play at the Heart of the Early Years Curriculum

One misconception which persists about learning through play and child initiated learning is that the child is in complete control and there is little or no adult input. Some people believe the child has total freedom and that interactions from the adult somehow, "interfere" with children's learning. Julie Fisher is keen to dispel this myth and is clear that the most important and precious resource in any setting are the adults who support children's learning in a variety of ways. In her book, *Moving on to Key Stage One,* Fisher recognises that there are aspects of the key stage one curriculum that play alone will not teach (2020) and the skill of an effective key stage one teacher is to identify these and adapt their role accordingly. Skills such as handwriting, phonics, reading, writing, knowledge and understanding of historical, geographical and scientific concepts and elements of mathematical development require adult led and adult initiated learning but can also be enhanced and embedded through playful learning opportunities. Play still has a role here in embedding and consolidating knowledge. Fisher examines the different roles the adult takes depending on the pedagogical choices they make.

The Researching Effective Pedagogy in Early Years (REPEY) study (Siraj-Blatchford et al., 2002) states clearly that it is not enough to create a stimulating environment and let children play without support, although there is a place for this. Staff also need to actively teach children which means modelling appropriate language and behaviour, sharing intelligent conversations and using play to motivate and encourage children. Due to increasing 'top down' pressures sometimes play can be sidelined and there is a sense that it is a brave school that makes space in the curriculum beyond the Early Years for play. However, many schools manage to do this successfully and achieve excellent outcomes.

Child–led learning capitalises on children's natural ways of investigating the world and these do not automatically stop when a child leaves Reception and moves into key stage one. The adult needs to make informed decisions about when to respond and interact and when to observe and remain quiet, this can mean that their role is less predictable than in adult-led activities and requires confidence. Through repeated experiences in an enabling environment children can practise what they have been taught and strengthen the connections between new learning and what is already established (Conkbayir, 2022). The adult can support the child to make these connections by verbalising them, for example, "This is like when we…" "We've done something like this before…" "Can you remember when we…."

A Playful Environment

As explained above, playful learning is extremely beneficial for children. This playful learning is best facilitated with playful individuals and through a playful environment. But what is a playful environment?
Empirical studies such as that conducted by Goodhall and Atkinson (2017) have found that children use both cues from adults and cues within the environment as to whether activities should be regarded as playful or non-playful, and studies have found that these activities, according to children are on a continuum (McInnes, 2019). This therefore highlights the importance of setting up an environment in a manner that encourages and facilitates the delivery of a playful curriculum. This can be done by:

- Following children's interests.
- Being reactive to "in the moment" provocations.
- Providing open ended resources.
- Focussing on the process of an activity rather than the product.
- Encouraging creativity and collaboration.
- Interacting with children whilst engaged in an activity rather than interfering (Fisher, 2016).

When considering how an environment is set up it should also be noted that ALL environments need equal consideration; indoor classroom spaces, outdoor classrooms and natural environments/ forest schools. We know that children do not always learn and develop in the same way and children should therefore, ideally, be able to access environments that best suit their needs and abilities (Richardson, 2025). It is therefore important that, when planning the curriculum, that each environment is considered and set up in a way that is playful and developmental at the same time. Creating a playful environment requires sustained efforts, particularly in regions where traditional approaches dominate. However, with education, and clear benefits of play-based learning, we can create a world where children are free to play and learn through it, children will continue to grow and develop in ways that are both joyful and fun.

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"Planning an Early Years Curriculum that includes the Geography children will be learning in term two, week three in Reception, for example, is not sensible... It is useful to have a big picture of the learning children need to acquire from their time in the EYFS, but we must also remember the importance of motivation, building on children's interests and learning through play. There is plenty of evidence to support play based learning in the early years... play is at the heart of an effective Early Education."

(Dr Julian Grenier, 2022)

Case Study

One of the fears cited by leaders who are keen to take play beyond the early years is that it will not be viewed favourably by Ofsted.
Hill View Infant Academy in Sunderland has been promoting learning through play for many years. Here's what Ofsted said about their curriculum in 2022.
"Leaders have ambitious curriculum goals and have identified the core knowledge and skills that they want pupils to learn in all subject areas. Careful consideration is given to the way the curriculum is taught. Leaders have shaped a creative, cross-curricular topic approach, with high-quality learning through play. Staff include pupils' interests in the curriculum to make the learning more relevant to them. Leaders regard the school as 'early years throughout'

All pupils enjoy learning through play every day. They independently access the wide range of learning activities including the outdoor classrooms and the new 'nature school'. The 'innovation sheds' attract pupils who want to understand more about everyday objects. In nursery, children learn what the objects are for and how they work. The school excels in personal and social education.
Pupils have positive attitudes to learning, they enjoy coming to school and attendance is high. When they independently choose their learning activity, pupils stay focused for long periods of time."

Staff and leaders at Hill View have been developing the curriculum over a number of years. There have been many changes and adaptations to meet the needs of the children, and there is much reflection from the team on how best to approach every aspect of children's learning. Teachers think carefully about what can be achieved through play based learning and whether this is the most effective approach to a particular curricular goal. As a result, the children have the right balance of adult led and child initiated learning, leading to strong outcomes and high levels of engagement and attendance. It is possible to learn a lot through play and the children at Hill View flourish and thrive as a result.

Reflection

Look at the environment in which children play and learn within your context. Do you feel that this is a playful environment? Do children think it to be a playful environment? What could you do to make it more playful in the way that the environment is set up and the resources that are provided?
When considering your curriculum, and thinking about how you encourage children to learn, are you thinking about play as part of that? And if so, how? Are you planning playful activities or hoping that they will happen organically? How can you facilitate a playful curriculum?
How do you share with parents/carers the importance of play and the details of your pedagogical approach to a playful curriculum?

Play is not just a supplementary activity but a fundamental aspect of early childhood education that enhances cognitive, social, and emotional development. While traditional educational models have often positioned play and structured learning as opposing forces, contemporary research and practice emphasise their interconnectedness.

A balanced approach, one that values play as a vehicle for deep, meaningful learning which empowers children to explore, create, and engage with the world around them. It is imperative that early childhood professionals, policymakers, and parents recognise the role of play in shaping well rounded, confident learners. By fostering playful environments and ensuring that play remains at the heart of the curriculum, we can support children in developing essential skills that will serve them throughout their educational journey and beyond.

Chapter 9: Play in School Based Settings

> *The environment plays a central role in the process of making learning meaningful. So important was this notion, that Malaguzzi defined the environment as the third teacher*
>
> *(Biermeier, 2015, p.72)*

Introduction

Opportunities to play at school are limited. For some time now, children in England have endured a 'knowledge based curriculum' accompanied by a regime of testing which means there is only one year group in the primary school where there are no statutory assessments. The imposition of this approach has reoriented pedagogic practice, shifting the focus from learning to teaching, impoverishing children's educational experience as a result. Education has become an act of compliance (Alexander, 2008) characterised by decontextualised activities focused on narrow learning objectives (Hordern and Brooks, 2023): a process that bears little relation to what we know about how children learn.

How Children Learn and How Schools Stop Them from Doing so!

It has long been understood that children learn best through play. Piaget (1962) confirmed the centrality of play not only in the development of empathy, creativity, the ability to collaborate with others, defer gratification and regulate emotions but also in promoting linguistic and cognitive development. Neurobiological research has identified how play strengthens neural pathways connecting the prefrontal cortex with emotion-control areas lower in the brain (Siviy, 2016), building emotional resilience as children learn how to modulate their emotions in stressful situations. As play has slowly been removed from children's school experience, it is little wonder that we have seen a stark rise in the number of children with mental health disorders such as anxiety and depression. We now live in a country where more than 1 in 5 children under the age of 16 has a probable mental health disorder (NHS England, 2023) and over 20% of children are persistently absent from school (House of Commons Library, 2025). While there are numerous factors that impact attendance and mental health, there can be little doubt that our school system is damaging children.

The School Wound

In over prescribing what children do at school, we have lost sight of the fact that play isn't what children do, it is who they are. When we stop children playing, we diminish children's sense of self (Olsen, 2009). Although Olsen's (2009) work was based in America, the ways schools wound children's sense of self can be seen in England too. Standardisation has killed creativity. Natural curiosity and exploration have been replaced with the need to 'be right' and children are encouraged to follow instructions rather than reimagine the world around them or take risks in their learning. There is now little opportunity for children to follow their drive to explore and wonder, just to comply with the prescribed curriculum. For some this is not possible and they rebel, others become numb, emotionally disconnecting from their learning, seeking approval for completing tasks and complying with instructions rather than learning for the joy of it. Olsen also found that setting by ability, which is now done as early as Reception for phonics lessons, causes some children to underestimate their abilities, some to become obsessed with perfectionism and others to feel invisible, average and unimportant. These wounds can last a lifetime and it is imperative that we do what we can to restore the place of play within our schools. This can be done by considering the learning environment and introducing playful pedagogies.

Playing Outdoors

The school playground can be a vibrant hub of activity where play can flourish within the school environment. Here, play can be child-led, motivated by the child's interests and can follow their own ideas free from adult agendas (Thompson, 2014). Physical risk taking in play supports the development of resilience and it is important that risk is assessed rather than eradicated. Consequently, Smith (2005) suggests that adults on playground duty should observe and support play without excessive intervention. However, playtime is often taken away from the children who need it most (Clements and Harding, 2023) and some children may need play behaviour to be modelled for them (Play Wales, 2024). Adults can also support play by providing open ended transformative resources which can be used in a variety of ways. These might include: natural and man-made materials like rocks, sticks, leaves, boxes, and fabric; sensory play materials like sand, water, mud, and sensory bins with various textures to stimulate children's senses; dramatic play props and equipment such balls, skipping ropes etc. The provision of carefully curated resources can also encourage play within the classroom.

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Continuous Provision

Continuous Provision refers to the resources that are consistently available to children, enabling them to continue learning while playing independently of adults (Bryce-Clegg, 2013; Carter, 2023). It is not simply a waiting activity for when the teacher is free, nor is it a reward or extension task for children who have finished an adult-led activity (Early Excellence, 2022). To be effective, Continuous Provision requires careful planning and high-quality, open-ended resources. These resources should be easily accessible, engaging, and designed to stimulate exploration, while allowing children to rehearse, revisit, and embed skills and concepts over time (Bryce-Clegg, 2015).

Given that space is often limited, every resource must earn its place in the environment (Carter, 2023). Continuous Provision can evolve over the year, starting with essential areas that children need to develop, and gradually expanding as the children's skills progress. While continuous provision is usually associated with early years, it can be effective throughout the school and will look different in key stage one and two as children need to develop different skills and face different challenges.

When introducing Continuous Provision in key stage one or two for the first time, it is helpful to discuss what has worked well in other year groups. With less written work in books than senior leaders may be used to, they may need reassurance that learning can still be evidenced. Visiting schools that already extend Continuous Provision into key stage one can be incredibly beneficial, particularly for staff who need to see how it might work in practice (Newman, 2024). There may also need to whole staff training drawing on the expertise of the early years team or external providers about how to use this pedagogic approach.

Hands on Experiential Learning

Along with playing and exploring and creating and thinking critically, active learning is one of the characteristics of effective teaching and learning defined in the EYFS (DfE, 2024). Hands on experiential learning involves active engagement with experiments, model making, creating art work, field trips and role play. It is an approach which allows children to learn by doing.

The experiential learning cycle (Kolb, 1984) involves experience (feeling), reflective observation (watching), abstract conceptualisation (thinking) and active experimentation (doing). This approach can be used to create authentic problem solving opportunities that support children's understanding of concepts and ideas (Morris, 2019). The value of hands on experiential learning is not limited to the classroom, it is an ongoing, lifelong process (Egan et al., 2023), however, this approach lends itself particularly well to subjects like science, maths, geography, history, art, drama and design technology. It can also be used as part of a cross-curricular approach.

Playful Teaching through Cross-Curricular Learning

Cross-curricular learning integrates multiple subjects into cohesive, practical, and playful activities, helping students connect new knowledge to prior experiences while applying it in real-world contexts. Designing birdhouses, for example, can incorporate science (studying habitats), mathematics (measuring materials), English (writing instructions), and art (decorating). Such approaches, grounded in Vygotsky's (1978) sociocultural theory and constructivist principles (Piaget, 1964; Kolb, 1984), promote hands-on, collaborative learning that enhances understanding (Bransford, Brown, and Cocking, 2000).

By fostering interdisciplinary connections, cross-curricular play encourages critical thinking, creativity, and cognitive flexibility, while improving long-term retention (Bransford, Brown, and Cocking, 2000). It also supports social-emotional development through teamwork and communication (Frost, Wortham and Reifel, 2012). Additionally, playful learning motivates students by making tasks more purposeful and engaging (Miller and Almon, 2009). This approach helps students develop lifelong skills by connecting different subjects in meaningful ways, preparing them to address real-world challenges with a well-rounded perspective (Darling-Hammond et al., 2017).

Project based learning

Similar to cross curricular approaches, project-based learning (PBL) is an effective strategy for integrating play into education, engaging students in real-world projects that require inquiry, collaboration, and problem-solving. By offering autonomy and choice, PBL fosters intrinsic motivation and deeper learning through hands-on activities, such as designing a butterfly garden that incorporates science, mathematics, and art. It also aligns with active knowledge construction (Piaget, 1964) and social learning (Vygotsky, 1978), encouraging meaningful and collaborative exploration (Bransford, Brown, and Cocking, 2000).

PBL supports comprehensive assessment through observation, rubrics, and reflective journals, allowing teachers to evaluate communication, collaboration, and creativity ensuring curricular coverage while fostering discovery and joy (Larmer, 2015). PBL also nurtures essential 21st-century skills like creativity, communication, collaboration, critical thinking, problem-solving, scientific, information and civic literacy (OECD, 2019). By encouraging trial and error, it nurtures resilience and a growth mindset (Barron and Darling-Hammond, 2008), preparing students for real-world challenges (Bell, 2010).

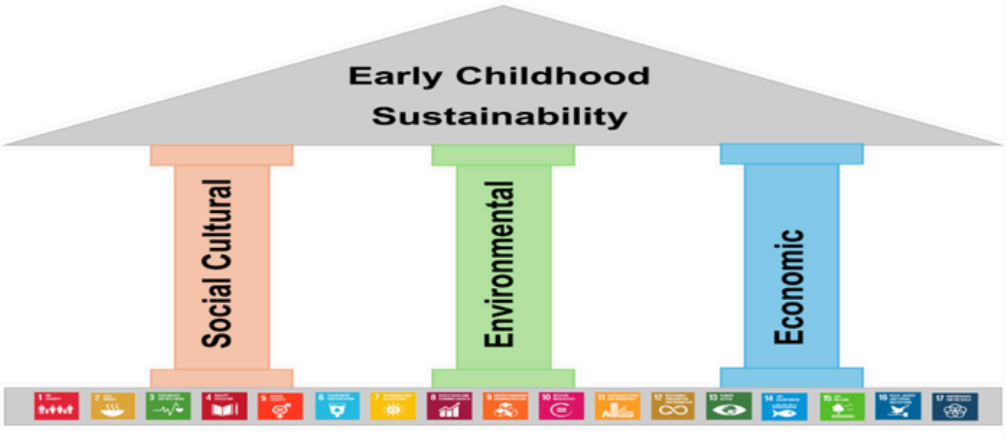
In this chapter we have indicated why play is not prioritised in schools, the impact this has on children's mental health and learning, suggested ways teachers can create environments which promote play and playful pedagogies that can be used to support learning. Play is the way that children learn, it is part of who they are, and as Einstein famously said, it is the answer to how anything new comes about. If we want a school system that meets the needs of children today and the workforce of the future, then we must encourage play in schools.

Chapter 10: Play and Sustainability

> *Sustainable Play belongs to children, and it is the responsibility of all to respect that Play Matters!*
>
> *(Boyd, Lee and Scollan, 2025)*

Introduction

This chapter discusses the concept of sustainability as a lens to understand *how* the world of play enables adults to engage and learn about sustainability with and for young children in environments that enable. Scollan and Farini introduce environments that enable as rights-based spaces where children and adults intuitively move between learning and teaching through immersion into play and meaningful dialogue (Scollan and Farini, 2021; Farini and Scollan, 2023). Early Childhood is a critical period for developing positive relationships with nature and a deep empathetical connection with our planet. The fundamental values underpinning positive relationships with nature are encompassed in the 3 Pillars of Sustainability; socio-cultural justice, environmental empathy of people and places, and, economical awareness. Boyd's (2025) Pillars of Sustainability and the UNESCO (2015) Sustainable Development Goals (SDG) below can help us make the connection between play and sustainability in everyday practice.



Pillars of Sustainability: Boyd (2025)

Sustainable Development Goals (UNESCO, 2015)

Sustainability is interwoven with pedagogical play experiences, offering learning opportunities that empower children to decode, question, empower and become advocates for their rights and their world. In this chapter, play will be explored through the lens of sustainability with a case study and photographs which illustrate examples of what sustainability might look like in practice. Engaging with the idea of sustainability and connecting it with the concept of play builds on existing knowledge to provoke reflection, creativity, curiosity and insights to learn and relearn how to see what exists in a child's play. It is powerful to recognise there are specific skills and understanding needed to know how and when to (i) immerse into a child's play and (ii) to translate play into meaning.

It is pertinent to reflect if adults always know how to tune in to the meaning and creations that children construct during their play. Garvey (1991) and Tovey (2012) remind us that although adults often tend to think they know what children are doing during play, a divide can exist between what children create during play and what adults see and assume about a child's play. Therefore, if we are to understand play through the lens of sustainability, we need to be mindful of our bias and expectations. The following section will focus on supporting awareness of the interconnections between the 3 Pillars of Sustainability (shown on p.67) and the 17 SDGs (illustrated above) and how they are embedded holistically in sustainable play. Sustainable play empowers, values and celebrates the rights of children (and the adults with them) to freely connect with their world, and all living things.

Reflection

How does the definition of sustainable play relate to:

(i) your practice

(ii) context of your setting?

Translating Sustainability into Practice.

Boyd, Lee and Scollan (2025) define rights based playful pedagogy through the lens of sustainability as the agentic, equitable and inclusive recognition of the non-human and human realities. Sustainability was introduced in the Brundtland Report (WCED, 1987, p.47)as a ''development that meets the needs of the present without compromising the ability of future generations to meet their own needs''. The 3 Pillars of Sustainability (i) Environment (ii) Economic (iii) Socio-cultural are at once interconnected and uniquely individual. This means we need to fully understand each pillar in its own right whilst recognising how each pillar influences the other. The holistic nature of the 3 Sustainable Pillars aligns with the 17 SDGs, becoming embedded in a globally recognised framework that informs and translates sustainability into everyday living and practice concerning all aspects of our shared planet human and non-human (UNESCO, 2015).

Authentic engagement, experiential leaning and co-construction of knowledge is required when exploring the characteristics of sustainable pedagogy in practice (Boyd, Lee and Scollan, 2025). Authentic engagement comes from both children and adults who are empowered and empowering, agentic, self-determined, dialogic, respectful and curious about their world. This requires a transformative approach that draws on intergenerational culturally diverse ways of being and seeing.

Reflection

Consider how the 3 Pillars of Sustainability are captured in practice.

Environmental Pillar in practice: Children developing empathy and care towards the non-human world

Economic Pillar in practice: Children grew, designed and sold seed packets in a child-led business venture

Socio-Cultural Pillar in practice:
A rainbow of 'Togetherness' constructed by children during Covid-19

Sustainable Play through a Rights Based Lens

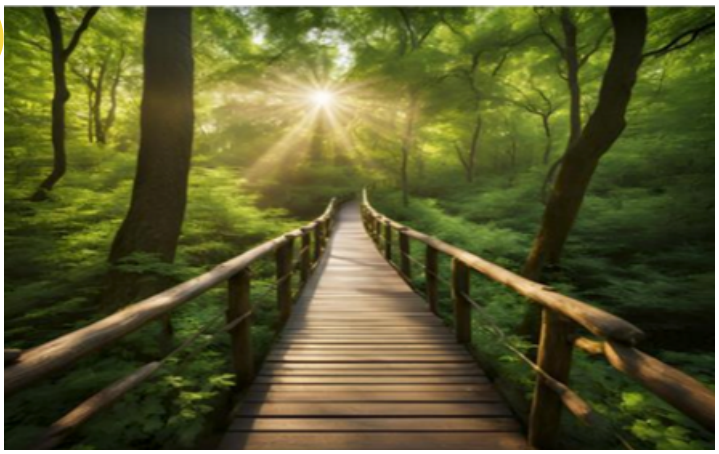
The UNCRC (UNICEF, 1989) general principles (articles, 2, 3, 6, 12) remind adults, and society to realise that all children are rights holders and should be respected for who they are, how they learn and how they explore their world. Fifteen years later, in 2004, the Committee on the Rights of the Child discussed the implementation of children's rights in early childhood, advancing recommendations in the form of General Comment No 7 (2005) to position early childhood as a critical period in its own right with young children as "holders of rights" (2005, p.1). The Committee's definition of early childhood includes "the period below the age of 8 years" (2005, p.2), advocating for young children to be respected and recognised as active citizens within their families, society and local environments. General Comment No 7 includes seven "features of early childhood" (2005, p.3) that address the uniqueness of early childhood and young children's lived realities. At this point we can see that General Comment No 7 advocates that young children under the age of 8 learn and explore through the genre of play.

According to UNCRC article 12 (UNICEF, 1989), children have a right to know, access and impact in the world they live in. Playing and playfulness are 'tools of the trade' that children use to achieve this. Froebel (1782-1852) reminds us that play is a child's work: where they problem solve as curious learners, constantly learning and connecting by doing. Froebel's principle of Unity and Connectedness relates to sustainability as, through the lived experiences involved in play, children learn about the interrelationships of all living and non-living things (Brehony, 2001; Bruce, 2020). It is evident that the 3 Pillars of Sustainability and 17 SDGs are not detached from everyday living; but are threaded through all aspects of our lives. When we become aware of the concept and complexities relating to sustainable play we can begin to make changes from, for, and with children using wisdom, knowledge and diffractive thinking. Boyd, Lee and Scollan (2025) created the term 'Wisdom Shepherds' to capture the importance of two-way learning and communication where we learn from the 'more knowledgeable other'. Scollan and Farini (2021) and Farini and Scollan (2023) argue that the more knowledgeable other is not a fixed role exclusive to adults; rather children and adults move between learner and educator role depending on the situation, focus and context. In play created by children, it can be the children who are the more knowledgeable other for adults, meaning it is us adults who need to learn from their actions and their meaning (Tovey, 2012; Bruce, 2020).

Reflection

If sustainable pedagogy were viewed as a bridge, where are you on the sustainable pedagogy bridge?

(Scollan, Boyd and Lee, 2024)



UNESCO Skills for 21st Century Sustainable Play

Sustainable play must be underpinned by pedagogy that is transformative and action-originated. Early childhood education for sustainability should empower children to evaluate critical societal issues, such as homelessness or food poverty (SDG1) and, make informed decisions, suggesting responsible actions aligned with the 3 Pillars of Sustainability. In 2017, UNESCO highlighted key skills, values and attitudes needed to create a sustainable world, advocating for education systems to provide opportunities for children to become change makers. To achieve this, a "profound transformation of how we think and act" (2017, p.11) is necessary. However, while the EYFS (DfE, 2024, p.12) seems to promote approaches which help children learn to "respond to what they hear with relevant questions", children are not encouraged to ask 'uncomfortable questions', or challenge responses from adults. This does not appear to align with the "action-oriented, transformative pedagogy" UNESCO recommends (2017, p.11).

Reflection

What does action oriented transformative pedagogy look like in your context?

Numerous societal issues impact children's everyday life and the practice of the adults around them. As early childhood professionals we need to be, able to confidently discuss these issues in an emotionally safe space. For example, we may share a 'real life 'story of homelessness or food poverty with children, to promote their consciousness and encourage real-world observations. Reading a sensitive story with children about difficult lived realities can be used to provoke an ethic of care, empathy, criticality and solution-based thinking, all of which can be transformative. This example demonstrates how sustainable provocations, in this case related to the socio-cultural pillar of sustainability, can empower children (and adults) to work collaboratively in self-directed learning as a strong community of learners (Lave and Wenger, 1991) as critical divergent thinkers. However, this approach requires a seismic shift in thinking about education from a hierarchical focus on teaching to a more problem-solving collaborative orientation as favoured in Reggio Emilia (Farini and Scollan; 2023). This is reflected in the CoEL set out in the EYFS (DfE, 2024). Here, the statutory guidance suggests that children must be encouraged to investigate, encounter and overcome difficulties, creatively develop ideas and strategies, thinking critically in this process. These characteristics closely align with the learning skills advocated by UNESCO. So, is it how the adult perceives the child in play or in facilitating activities for children that move the CoEL from process learning to product orientation?

Reflective Activity

Read the case study below and justify how:
(i) each pillar relates to the case study.
(ii) the 3 pillars relate to your practice, pedagogy and activities.

Case Study: Preparation of an Intergenerational Forest School Session

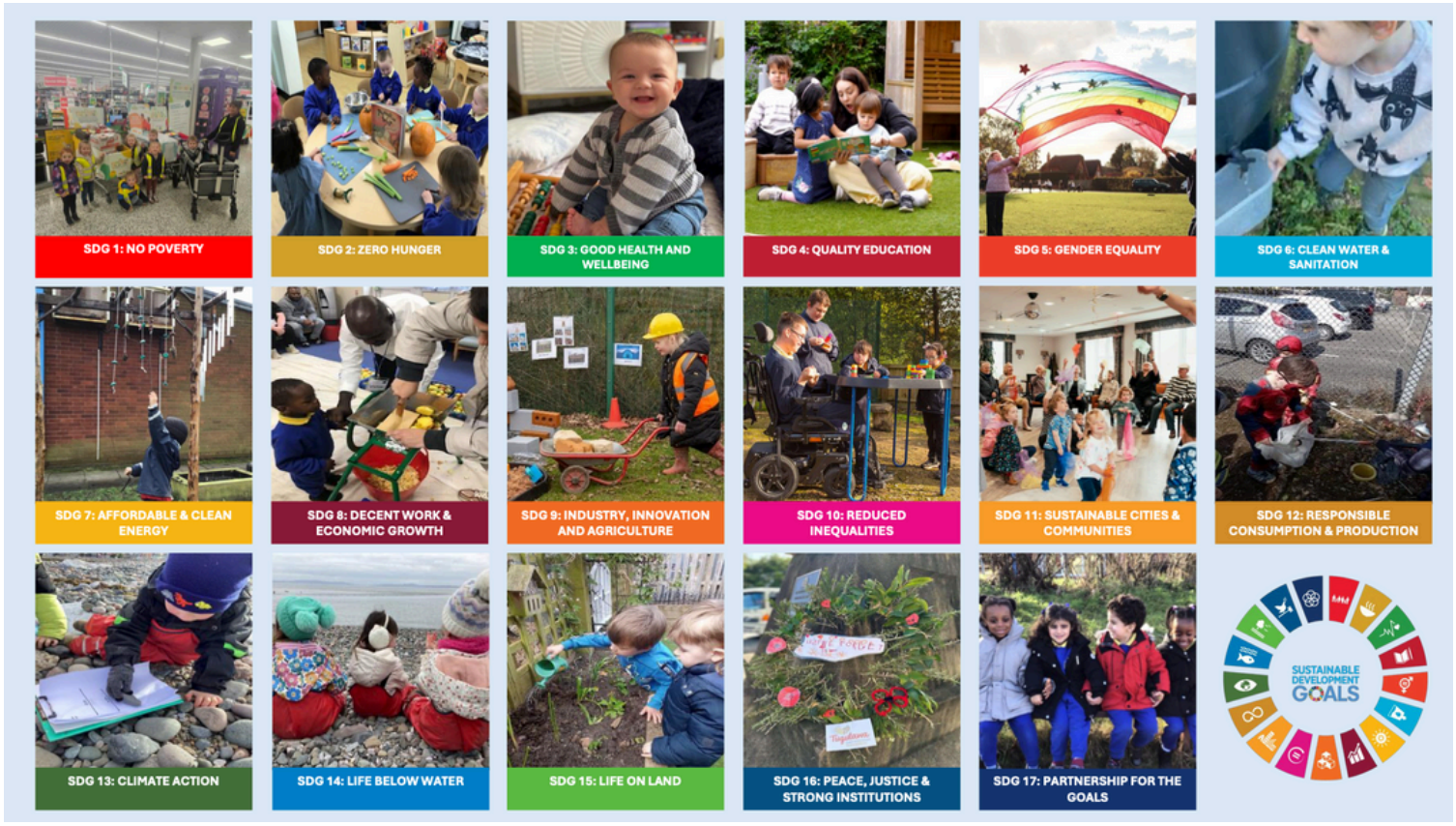
This case study demonstrates how the 3 Pillars of Sustainability, the SDGs, sustainable play and sustainable pedagogy connect in practice.

In preparation for an intergenerational Forest School session, children and adults experienced economic sustainability through a shopping trip. In a recent Good Childhood Report (The Children's Society, 2023), concerns of older children were recorded with regard to their having little or no experience of money, causing anxiety for future economic understanding. Therefore, as children do not always use, see or feel real money exchanges in life or during play, the decision was made to avoid plastic card transactions. Prior to the shopping trip the children had collaborated together and alongside the older members of the future Forest School session to plan what would be required for the session. This included food to be cooked on the fire pit and a discussion of dietary needs including allergies and intolerances. The shopping requirements were then divided into individual shopping lists. Each child was given a £5 note to visit a local shop. On the day of the visit, the children were met at the entrance by a member of staff who proceeded to show them around the different sections. The children identified their individual purchases and took them to the till. A monetary exchange happened with the adult on the till and each child was given a receipt and change. This simple playful experience provides children with early awareness of economic sustainability.

Reflective Activity

Look at the SDGs in action in the diagram below to discuss how the images relate to your context. Are the SDGs visible in your practice? Where? How? Why?

Sustainable Development Goals in Action



On the day of the intergenerational Forest School session, the leaders had a plan for the day but, they were also aware of the need to be flexible and adaptable to ensure that all of the participants could fully engage in the level of play they wished to on that day. Alongside environmental sustainability, this approach supported the 2nd and 6th Principle of the Forest School Association (2011): "to support the development of a relationship between the learner and the natural world' and "to create a community for development and learning."

Reflection

How do the Forest School principles or aspects from your own practice link to the (i) 3 Pillars of Sustainability (ii) SDGs?

Throughout the session the children had the freedom to play and time to express themselves communicating in a variety of ways in this shared experience. The importance of listening, hearing and reacting to young children's expressions and self-determined choices are vital components of inclusive sustainable pedagogy (Boyd, Lee and Scollan, 2025) and socio-cultural sustainability. Confidence, knowledge and self-esteem developed through the chance to participate in playful experiences and challenges from fire lighting to building natural habitats, supporting one another irrespective of age, gender and ability. These playful moments can enhance skills in the natural environment, respecting the ecological impact and promotion of intergenerational sustainability, so important for lifelong learning.

Following the session, the Forest School leaders and early childhood professionals reflected on the playful experiences and how their professional dialogue style and listening filters (Scollan and McNeil, 2019) are influenced by interactions and expectations, that is, by the social contexts of their practice. We all have listening filters, some of them unique, some of them shared with others, built by our training, life experiences and expectations. Our listening filters may enable or prevent effective listening and responses in practice with children. Reflections on communication styles suggest that managing young children's rights to be heard is a complex process. For example, a 42-month-old child experiencing all day outside play for the first time found it overwhelming. The child expressed his reaction to the change in environment and routine through constant verbal and non-verbal communication with a sensitive early childhood professional. The adult and the child found a safe space where their concerns were discussed, listened to, authentically heard, and responded to.

Video provided by

Siren Films

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Reflection

Do you really listen to children?
Self-assess how you hear, listen and respond to a child's concerns or expressions.

Sustainable play can be a universal way for children and adults to freely engage and connect with their worlds and each other, supported by knowledgeable early childhood professionals. To fulfil its ambition, sustainable pedagogy requires early childhood professionals to be critically reflective, honest and passionate in their commitment to enabling children to engage in agentic and critical ways of thinking. Through carefully thought out activities and free-flow child- led experiences underpinned by the 3 Pillars of Sustainability (Boyd, 2025), the 17 SDGs (UNESCO, 2015) and the CoOEL (DfE, 2024) we can support authentic engagement and sustainability.

SDG 4 specifically highlights the quality of education for all, starting in pre-primary. For further examples of how to embed sustainability in early childhood practice, please see An Early Childhood Education for Sustainability resource that embeds the Sustainable Development Goals and STEM into pedagogical practice .

"Education is the key to a better future and anyone working within any part of education needs to recognise this. " (Boyd et al., 2021, p.8).

A Time for Reflection on Sustainability and Training in the Early Years

Early years students hold a crucial role in shaping the lives of young children during their most formative years. The way they approach learning, teaching, and play has lasting implications, not just for individual children, but for the broader society and environment. As part of delivering apprenticeships and other early years training programmes, it is essential to position play at the heart of learning while integrating sustainability into everyday practice. Sustainability in early years education is not simply about protecting the planet; it is about instilling lifelong values and habits that will empower children to become responsible citizens who care for their communities and the world around them.

Children in the early years primarily learn through observation, imitation, and hands-on experiences. This makes early childhood education a powerful space for fostering sustainable mindsets. By modelling eco-friendly behaviours, such as recycling, conserving energy, reducing waste, and nurturing nature, early childhood professionals can inspire young children to adopt these habits naturally. When sustainability is embedded into play, it becomes a lived experience rather than an abstract concept. Whether through sensory gardening, nature walks, or upcycling materials for creative play, sustainability can be woven into daily routines, encouraging curiosity, problem-solving, and respect for the environment (Somerville and Williams, 2015).

Sustainability is also deeply connected to global initiatives such as the United Nations Sustainable Development Goals (SDGs). These goals highlight education as a crucial tool for tackling climate change and broader environmental challenges (UNESCO, 2017). Early childhood professionals have a unique opportunity to contribute by creating meaningful learning experiences that connect children with nature and foster a sense of environmental stewardship. Research suggests that early exposure to nature-based play and sustainability practices can lead to a stronger connection with the environment later in life, encouraging children to become proactive in caring for their surroundings (Elliott and Davis, 2020).

However, the role of early childhood professionals in promoting sustainability extends beyond the classroom or nursery setting. By engaging families and communities in sustainable practices, early childhood professionals can create a ripple effect by spreading awareness and fostering collective responsibilities. This means that sustainability training should not only equip students with theoretical knowledge but also prepare them to act as role models, advocates, and change-makers within their communities (Siraj-Blatchford et al., 2010). Simple initiatives, such as community gardening projects, eco-friendly workshops, and collaborative recycling schemes, can bridge the gap between early years settings and families, ensuring that sustainable practices are reinforced at home.

Investing in sustainability within early years training is not just about preparing children for the future, it is about empowering them to actively create a better one. This requires providing children with enriching play environments where they can explore, experiment, and engage in a trial and error approach to understanding the world around them. Learning through play allows children to develop problem-solving skills, creativity, and resilience, all of which are essential for addressing the complex environmental challenges of the future. Sustainability should not be treated as a standalone subject to teach, it should be a way of living, deeply embedded into all aspects of early years education and training.

By embracing this responsibility now, we can cultivate a generation of environmentally conscious, compassionate, and capable individuals. When children see sustainability as a natural and joyful part of their daily lives, they will carry these values forward, ensuring that our efforts today lead to a healthier, more sustainable world for generations to come.

Chapter 11: Play, Love and Nurture

> *'We don't care for children because we love them; we love them because we care for them'*
>
> *(Gopnik, 2016, p.87)*

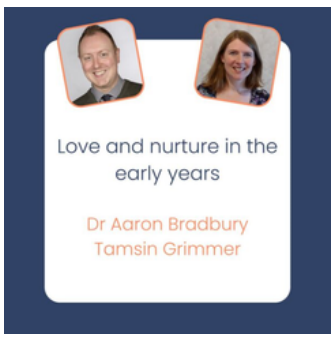
Introduction

The neurohormone oxytocin, often referred to as the 'love hormone' (Neumann, 2023) is vitally important in developing attachment, nurturing relationships, and promoting positive emotional and prosocial experiences throughout life (Berceanu et al., 2024). Production of this hormone determines how our social lives are experienced, from a child's first caregiving bonds to friendships and connection, helping develop feelings of empathy, security and trust (Jones et al., 2017). Understanding this helps us to support children's play, and nurture loving and trusting relationships within playful pedagogy, enabling children to develop the skills required to build positive social connections as they journey through life.

Love and Nurture is Child-Centred

It is important that all children are acknowledged and the experiences we provide stem from their interests (Yates, 2018; Arnott, 2023). This supports all children to feel valued as individuals; early childhood professionals observe interests, guiding rather than instructing, helping children to make decisions and choices. For example, following children's lines of enquiry, presenting provocations and supporting and encouraging children to represent and explore their own ideas and thoughts freely.

Early childhood professionals should listen actively, showing genuine interest, being in the moment with children, encouraging discussions and allowing their ideas to develop at the children's rate (Clark, 2022). Children should have uninterrupted time to enable them to follow their interests. A nurturing approach enables creativity to thrive through ensuring ideas are not imposed by early childhood professionals. It is the process which is key and not the end product. Skilful and sensitive interactions (open ended questions, speculating, reciprocating, clarifying, repeating) support children's ideas and help to extend them. This open-ended approach is incredibly powerful for all children as they can design and create something that is meaningful to them without any pressure to verbalise their thought processes (Arnott, 2023).



Podcast provided by
The Voice of Early Childhood

THE VOICE OF EARLY CHILDHOOD

SCAN ME

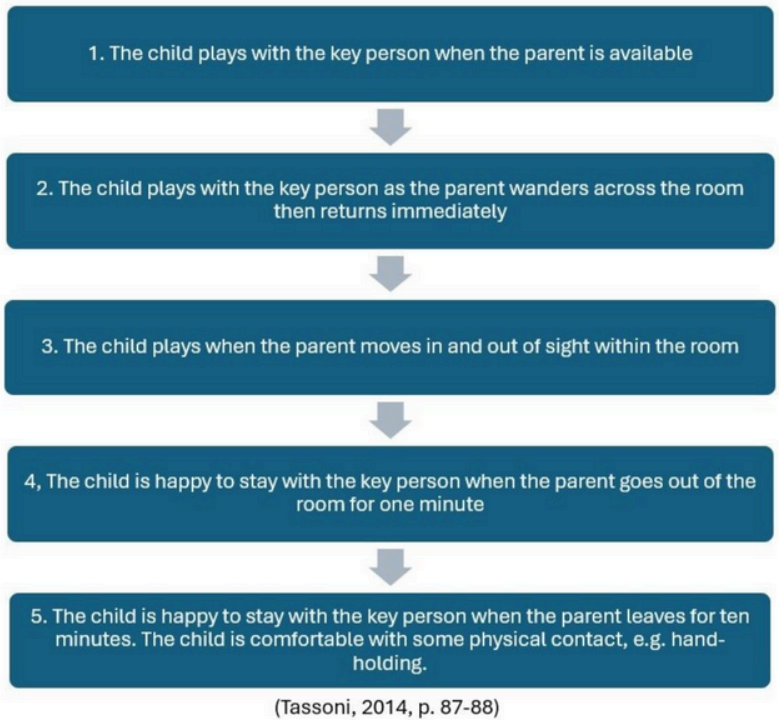
The graphic shows the many ways that a loving and nurturing approach can remain child-centred.

Case study

The children were talking to an early childhood professional about things getting lost. The story, 'This is the Bear' by Sarah Hayes was chosen following this discussion. After lots of missions to find and rescue the bear during various scenarios in the garden, interesting discussions took place about waste management (as bear was found on a rubbish heap) and "making new things out of old things". Through this child-centred approach, the children showed great enthusiasm in learning about recycling, reusing and caring for the environment.

Love, Nurture and Relationships

Children learn best through loving, trusting and nurturing relationships and play can be a facilitator to establish and strengthen these. It is essential to ensure each child has a key person who supports children's emotional wellbeing and enables them to become familiar and confident in the setting. The more children's physical and emotional wellbeing is nurtured by a trusted adult, the more inclined they will be to form meaningful relationships, be curious, engage in activities, problem solve, explore the wider world and develop independence. Secure attachment relationships correlate strongly with children's health, happiness, better self-regulation, social competence and resilience (Zeedyk, 2013; Read, 2014; Nicholson et al., 2023). Play can heal trauma wounds specifically where previous experience has led to insecure attachment with a main care giver (Kingston-Hughes, 2022) making play a powerful way to build and maintain relationships.



(Tassoni, 2014, p. 87-88)

Tassoni (2014) describes a five-step settling-in process that centres around play, allowing children to get to know and build relationships with the key person (see graphic) with the support of their parent. Encouraging parents to recognise their own importance in children's development encourages participation and can build confidence (Kambouri et al., 2021). In the absence of the proverbial village, trusted adults might feel responsible for their children's overall attainment, possibly missing opportunities to prioritise fostering attachment. However, evidence presents a strong argument for play as a learning resource, since it promotes skills such as confidence, self-motivation and a sense of joy in being (Panksepp, 2015). Sharing this with parents empowers them to enjoy playing with their children in the knowledge that they are making a difference to their development.

Extract from Outstanding Ofsted report

"The childminder creates a warm, loving environment for children. She captures children's interests and expands their skills and knowledge... [Children] feel valued and special, giving them the self-belief and confidence to flourish in her care. Children are joyful and love their time with their childminder."

(Childminder Ofsted Report, 2024, p.2)

When we think about the term 'nurture', we might think of the way children are cared for, their strengths promoted, their skills developed and their personalities established. Bradbury and Grimmer (2024, p.24) suggest that "To lovingly nurture our children, we meet their immediate needs with a long-term view, just as we might nurture a seed, knowing that we are helping a plant or flower to grow." It is also possible to nurture play so that it becomes cared for, promoted and established within the culture of the setting. Nurturing play as a developmental tool can be an equaliser as it is low cost and universal and sharing play ideas and values with others who have a relationship with the child can support consistency and mutual understanding. For example, play ideas can be initiated and developed across settings, and all family members can share their experiences of playing.

Here are some ways that play can be linked positively to relationships:

- Two-way communications: Learning about play from families can deepen understanding of their history and act as a social tool to bring people together around the child.
- Engaging parents by creating invitation evenings: Rather than judgement and expectation ('here's what you should do'), we nurture invitation and example (here's what we do – and why').
- Using play to learn about the child and what interests them: Play can facilitate relationships between the child, parent/caregiver and the practitioner.
- Understanding that play is not always easy for parents: Being mindful and holding space for experiences families may have gone through that could have made adults play-averse.
- Providing structure and specific ideas: Sharing play invitations, play dough and sensory recipes, or holding parents' evenings to support play ideas are powerful tools to allow parents to 'dip their toe' into play without feeling too overwhelmingly vulnerable.

Parent testimonial following love, nurture and play parents evening at Preschool

"As a mum of 2 young children who quite often struggle with emotions, this was the perfect opportunity for me to attend to… learn about loving play with my children. Since this evening, I have put some of the techniques in place and can connect with my children through play whilst talking about these emotions… Finding compassion for myself through the love and nurture techniques has helped me stay grounded and feel more open to playing with my children. I never knew how much connection could come from simple games."

Using Loving and Nurturing Touch

It is impossible to work with young children and not use touch in our practice, for example, when changing nappies, helping children dress, praising with a high-five, holding a child's hand beside a busy road or comforting with a cuddle (Grimmer, 2021). Touch is used in a variety of ways during play and playful interactions. Bergnehr and Cekaite (2018) identified five different ways that early childhood professionals use touch: controlling, affectionate, affectionate-controlling, assisting and educative (see graphic). Sometimes we use touch to aid learning or enhance the play and being physically affectionate is broadly seen as an essential part of early childhood education and care.

(Types and use of touch adapted from Bergnehr and Cekaite, 2018)

Touch is vital with young children and supports both cognitive and emotional development, contributing to secure attachments, reducing stress and releasing feel-good chemicals in the brain: oxytocin, dopamine, serotonin and endorphins (Carlson, 2005; Ardiel and Rankin, 2010; APPG, 2020). Some children may have touch as a love language, meaning they demonstrate their love and communicate through physical contact (Chapman and Campbell, 2012). If we observe a child craving more physical touch than others we can use positive touch in a reciprocal way, helping them to feel wanted, loved and helping to build a secure attachment.

Using touch within play is not without its challenges. Touch is associated with intimacy and sometimes early childhood professionals are worried that using touch in a loving and nurturing way will have safeguarding implications; their touch could be misconstrued, or they could open themselves up to allegations of misconduct (Piper and Smith, 2003; Johansson et al., 2018; Cruickshank, 2020). However, the benefits of using touch far outweigh these concerns and the Department for Education in England warn against early childhood professionals having a 'no-contact' policy believing it can "leave staff unable to fully support and protect their pupils and students" (DfE, 2024a, p.45) instead encouraging sensible policies to be adopted which address this area. Therefore, early childhood professionals should ensure their setting's policies address this area and acknowledge that all children need a basic level of physical touch (Grimmer, 2024).

Grimmer (2021:2024) suggests staff teams discuss how they use touch and consent within their practice, explicitly detailing what these interactions will look like and how touch will be used, for example, can a child sit on our lap and how might they do this (on one knee, both knees facing outward, straddling facing inward)? Can early childhood professionals kiss a child or blow a raspberry on them? Can we hold a baby close, cheek to cheek? What about an older child? How do children of all ages give consent? Including this information and this level of detail within a 'relationships', 'loving pedagogy' or 'safeguarding and child protection' policy would offer early childhood professionals confidence when using nurturing touch with their children (Grimmer, 2024).

In this image the powerful impact of warmth and physical touch is evident. Reading stories linked to F's interests also supported him to settle and become familiar with his new environment.

Here are some ways we can positively use touch within playful interactions:
Ensure staff are aware of signs of dissent, when a child does not want to be touched, and how to respond.

- Assist children when dressing up or engaging in role play.
- Allow children to sit on your lap and comfort them with a cuddle if they are tired or upset.
- Offer children a 'high 5' or gently squeeze their shoulder when praising them.
- Play games that require physical touch like circle games (holding hands), rough and tumble or finger rhymes.
- Offer them positive touch throughout the day, for example, engage in a 'thumb-war'!

Love and Nurture Fosters a Sense of Belonging

A sense of belonging refers to an individual feeling 'accepted, valued and 'at home' in the setting or provision' (Grimmer, 2024, p.20) and 'comfortable, included, valued and a sense of connection with others' (Bradbury and Grimmer, 2024, p.9). Belonging puts attachment theory into daily practice and it is an essential part of inclusive practice as it reduces feelings of social isolation and helps to combat marginalisation (Early Years Coalition, 2021). Siegal and Bryson (2020) helpfully suggest that children need to feel safe, seen, soothed and secure in our care, however, it is difficult to observe this in practice. In an attempt to address this, belonging is one of the observation points in Bradbury and Grimmer's (2025) *Love and Nurture Rating Scale*, which offers an opportunity to observe, discuss, reflect upon and review practice.

The graphic demonstrates how we foster a sense of belonging and on a practical note this means we:

- Smile, greet each child by name and tell them we are glad they have come today;
- Get down to children's level when playing;
- Help children feel 'at home' by incorporating cultural aspects into play, e.g. food, music or languages;
- Keep our provision centred around the children and their interests and fascinations;
- Use positive touch, for example, cuddling a child when upset or tired;
- Act as a co-regulator and nurture children's self-regulation by recognising and reducing any stressors and helping the child to regain feelings of calm (Grimmer and Geens, 2022).

Case Study

Amaya recently joined our setting and initially, she was hesitant to engage with peers, clung to her caregiver during drop-off and showed signs of anxiety in the unfamiliar environment. To support her settling in and help Amaya feel included and build trust, Clara (key person) began by learning about her interests and family background. Clara greeted Amaya warmly each morning, offering a comforting hug or holding her hand as she arrived. Clara stayed close by, observing but encouraging Amaya to explore while reassuring her with gentle words and smiles. Over time, Amaya began seeking Clara for guidance, demonstrating a growing attachment and feeling safe and valued.

Clara also observed Amaya's love for cooking and used this interest to create a connection, introducing a café in the setting, with tablecloths, real-world packaging and recipe books. Then, other types of equipment were seeded into the environment to encourage play (delivery trucks and shops in the small world area, saucepans, whisks and sieves in the water play and a mud kitchen outside). Clara observed Amaya play in parallel at first, watching others play until another child asked her a question when she began to interact and immerse herself in the play. She is culturally aware of her identity, which led her to discuss her favourite foods and her mum's cooking and she offered to bring something to share. Clara, (observing the conversation from a distance), extended this conversation with Mum and invited her to visit and cook with the children.

Over time, Amaya's parents have noticed a positive change, sharing that she enthusiastically talks about her friends and teachers at home and excitedly about her day. Her parents have expressed gratitude for the love and care provided by Clara and the staff, which helped Amaya transition smoothly and belong to the setting community.

Reflection

How do you think Amaya was feeling when she initially joined the setting?
What might an equivalent feeling be for you as an adult?
How did the key person help to foster a sense of belonging for Amaya?
To what extent does Amaya feel safe, seen, soothed and secure (Siegel and Bryson, 2020)?

Knowing the children you work with and being emotionally attuned to them will help to build secure attachments. Consider how well you know your children's emotional needs: are there any ways in which you can help them settle in quickly and develop better relationships with staff?

Summary

In this chapter we explored the connection between play, love and nurture, offering child-centred strategies and drawing examples from practice. Themes offered practical support with relationship building, developing a sense of belonging and advocating the child's voice, together aiding protective factors which shape children's critical early development (Draper et al., 2024). Play enables us to be genuinely ourselves without conscious effort and therefore fosters feelings of trust and connection within relationships (Harwood, 2024). By remaining child-centred, prioritising relationships and using loving and nurturing touch in play, we foster a sense of belonging within our children and will enable our children to thrive as they grow and develop.

Reflective Activity

Why is love and nurture important within a play-based pedagogy?
What do our teams understand by 'love and nurture'?
How can we ensure everyone has a similar understanding?
How do we use touch to lovingly nurture our children?
Where is this incorporated into policy?

Video provided by

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SCAN ME!

Chapter 12: Play Therapy

> *Follow the child's lead to the meeting of minds.... Tuning in, observing and wondering comes first*
>
> *(Early Years Coalition, 2021, p.32)*

Introduction

This chapter aims to orient early childhood professionals and other professionals to Play Therapy with children aged 0-8 and it may come as a surprise that it is not a new therapy, with the first dedicated text on Play Therapy published in the 1940's (Axline, 1947). Play Therapy has been described as a forgotten psychological science (Renshaw and Scira, 2024). However, this developmentally sensitive form of child psychotherapy is evidence-based, with high quality research confirming both wellbeing and developmental benefits for children (Ray, 2025).

The British Association of Play Therapists (BAPT, n.d.) defines Play Therapy as:

"the dynamic process between child and Play Therapist in which the child explores at his or her own pace and with his or her own agenda those issues, past and current, conscious and unconscious, that are affecting the child's life in the present. The child's inner resources are enabled by the therapeutic alliance to bring about growth and change. Play Therapy is child-centred, in which play is the primary medium and speech is the secondary medium."

Play Therapy post graduate tertiary training prepares therapists to become specialist paediatric mental health professionals. The Professional Standards Authority (PSA n.d.) accredits two Play Therapy registration associations in the UK: 1) BAPT; and 2) Play Therapy UK (PTUK n.d.). Play Therapists support children, youth and families from diverse populations across a wide range of clinical and community settings, predominantly working with children aged 0-12 (Renshaw, Parson and Stagnitti, 2023). With prevention and early intervention recommended to decrease the likelihood of future adversity and maltreatment in childhood, many Play Therapists choose to focus their work in the early years (Mathews, Thomas and Scott, 2024).

Play Therapy in the Early Years

Play is a vital component for child-centred practice in the early years. Early childhood professionals, allied health and health professionals may draw on the natural therapeutic qualities of play in their practice; this, however, does not mean they are a Play Therapist nor providing Play Therapy. Play Therapists skilfully use the therapeutic powers of play as psychotherapeutic agents to foster healing and enhance developmental growth (Schaefer and Drewes, 2014); ensuring 'the therapeutic powers of play are the mechanisms in play that actually produce the desired change in a client's dysfunctional thoughts, feelings, and/or behaviours' (Schaefer and Peabody, 2016, p.24). Play Therapists provide a range of services in early years settings, including individual Play Therapy for children, Group Play Therapy, and Filial Therapy (family play therapy), therapeutic assessment, specialist consultation, supervision of education staff, and professional development.

There is strong alignment between early years education pedagogies and the foundational theories and knowledge that underpin Play Therapy. Play Therapists learn a range of key theories, with child-centred practice a central component of training programs. A child-centred approach to education that emphasises play, relationships, community and nature, which remains central to early years education today, dates back to nineteenth century Froebelian pedagogy. The uniqueness of children and childhood is both a humanistic psychology construct and central to many educational pedagogies practiced today, for example, Reggio Emilia approach, Forest School, and Steiner/Waldorf, to name a few. Martela (2024, p.186) proposes that common educational philosophies can intersect together at the nexus point of human flourishing in education, arguing that the "promotion of flourishing ought to be one of the central aims of education." UNESCO's International Science and Evidence-Based Education Assessment: ISSE Working Group 1, (de Ruyter et al., 2022, p.74) defines human flourishing as:

"...both the optimal continuing development of human beings' potentials and living well as a human being. It means being engaged in relationships and activities that are meaningful, that is, aligned with both an individual's own values and humanistic values, in a way that is satisfying to them. Flourishing is conditional on the contribution of individuals and requires an enabling environment."

And the Organisation for Economic Co-operation and Development (OECD) Programme for International Student Assessment (PISA) (2024, p.8) acknowledge the strength of drawing from both education and psychological philosophies, knowledge, and workforces towards the advancement of:

"Education for human flourishing embodies the three principles on which future education systems should be built. It encourages a broader range of capabilities, spanning the academic, the caring and the creative. It nurtures the designers of fair and sustainable models for the future. And it restores meaning to people's lives."

Central to human flourishing remains the foundational importance of trustworthy and nurturing relationships within engaging environments; this can be the place where Play Therapy and education meet and collaborate.

Axline (1947, pp.141-170), an educator herself, dedicated a section of her now seminal Play Therapy text to "Implications for Education". It was always her intention for Play Therapists to operate in both specialised environments with children who require expert support, and guide early childhood professionals, parents and educators who spend significant time with children in adopting therapeutic skills to support children's emotional wellbeing. Stulmaker (2013) reviewed the different Play Therapy programs whereby teachers learn therapeutic skills, and Renshaw (2022) updated this review as part of researching the now evidence-based, Teacher's Optimal Relationship Approach (TORA). Play Therapists are uniquely equipped, with researched backed approaches to integrate playful therapeutic skills into education settings.

From Play Therapists, professionals can learn carefully curated knowledge with aligned therapeutic skills for use in everyday teaching moments (Renshaw 2022). Areas of interest for early childhood professionals include: how attachment theory can assist in relational activation of children's exploratory [learning] system (Ainsworth, 1967; Bomber, 2007; Geddes, 2006); the neuroscience of optimal relationships for child development (Porges, 2022; Schore, 2022); and the neuroscience of the brain's play circuitry – ancient neurological mechanisms in the brain that activate joy through play and playful relationships (Panksepp, 1998). The scope of Play Therapy practice in early years settings is broad. From direct therapeutic supports, psychoeducational recommendations for early childhood professionals and parents for commonly experienced childhood concerns, through to consultation services to integrate therapeutic qualities and enhanced play into learning communities.

Case Study

This case study demonstrates the outcomes for one child (Beth, aged 5) who attended Humanistic Group Play Therapy (GPT) for vulnerable children during the transition from Reception to Key Stage 1 (KS1). The GPT was co-facilitated by a Play Therapist and a TORA Certified Teacher©. Beth was referred by her teacher for 10 sessions of GPT due to significant shyness observed during transition visits, which prevented Beth from communicating her needs around toileting and exacerbated her distress. The teacher hoped GPT might also give Beth a boost in her confidence with her peer social relationships. Four children attended a ½ hour weekly GPT session. The playroom for GPT was set up with a range of play and creative resources. The group co-facilitators utilised therapeutic skills during play with the children to create a child-centred atmosphere. The Strengths and Difficulties Questionnaire (SDQ), a reliable and valid assessment tool (Stone et al., 2010), was completed by class teachers before and after the intervention to screen for both positive and negative psychological attributes [behavioural, emotional and psychological] (Goodman, 1997). Beth's total difficulties, hyperactivity, peer problems, internalising and externalising difficulties reduced after attending GPT. Continued in-class support was recommended with a focus on therapeutic skills to assist her enduring emotional problems and facilitate ongoing pro-sociality development. Beth's Teacher was well equipped to implement these recommendations due to prior TORA training and ongoing access to supervision when integrating therapeutic skills into education practice.

Chapter 13: Challenging Play

> *My childhood play took me to extremes, and all of them, I now understand, were a fun way to test the social realities into which one is born. Surely this is a most important evolutionary function of play—finding out what is fun and fair or not fair on the field of life.*
>
> *(Pankseep, 2010, p.247)*

Challenging Play

When children feel secure, and when adults put their relationship with the children first, are attuned to them and are knowledgeable and nurturing, play thrives. When children are truly absorbed in play we see this in their playful behaviour. Occasionally, though, children's play can be misinterpreted by adults as silliness, being too rough or boisterous and, most concerningly, not suitable (Greishaber and McArdle, 2010; Nutbrown, 2011; Grimmer, 2017; 2019).

Play teaches our children so many skills that are essential for their future lives. They learn how to cooperate with others, develop friendships, resolve conflict, become empathetic, develop their executive functioning skills, such as planning, using their working memory, being flexible in their thinking. As mentioned in chapter 3, play helps to develop children's self-regulation skills so that they learn how to be resilient, bounce back after difficulties and know how to regain feelings of calm when they are overwhelmed or dysregulated. Most of life's learning is discovered through play, for example, love, laughter, relationships, and boundaries (Kingston-Hughes, 2022). Through play, children are able to develop a sense of self and strengthen their relationships with others, test boundaries, and explore different ways of being and behaving. However, children are still learning these skills and will sometimes make mistakes or find this learning difficult.

If we consider the hundred languages of children (Edwards, Gandini and Forman, 2012) the way they play and behave is another language. Therefore we need to listen in to these languages and attune to our children to gain a deeper understanding of children's perspectives about their experiences and accept their play choices. This chapter considers some common play behaviours that are often misinterpreted as misbehaviour: risky play, weapon play, rough and tumble play and schematic play.

Risky Play

Play that challenges children and involves risk has many benefits, for example, supporting physical development, building confidence, problem-solving and learning about consequences and mistakes (Sandseter Kleppe and Sando, 2021; Kingston-Hughes, 2022; Cooper, 2023). The British public body responsible for the encouragement, regulation and enforcement of workplace health, safety and welfare, the Health and Safety Executive (2012, p.1) is clear about the role of risky play: "Play is great for children's well-being and development. When planning and providing play opportunities, the goal is not to eliminate risk, but to weigh up the risks and benefits. No child will learn about risk if they are wrapped in cotton wool". They point out that "the opportunity for play develops a child's risk awareness and prepares them for their future lives." Despite its many benefits, early childhood professionals often perceive risky play as challenging and can find it difficult to know how to incorporate it into daily life within settings (Spencer et al., 2021). However, providing opportunities for children to learn how to assess and manage risk while building resilience and self-reliance are crucial (Gill, 2007). As early childhood professionals we need to create an environment which embraces risky play and balances risk and challenge for young children (Cooper, 2023).

According to Sandseter (2009) risky play can be broken down into six main areas:

1. Rapid speeds
2. Dangerous tools
3. Dangerous elements
4. Rough and tumble
5. Great heights
6. Disappearing or getting lost

Therefore it can be helpful to consider when and how children have opportunities to play in these ways within our schools and settings. There are easy ways to include these risky elements, for example, simple games like peek-a-boo and hide and seek allow the sense of disappearing and getting lost and incorporating woodwork can enable us to use dangerous tools (Moorhouse, 2018).

Case Study

In the outside area Janbee (aged three) and Marissa (aged four) were climbing on and jumping off milk crates. Janbee was nervous about jumping off and Marissa said, "It's OK to be a bit scared, but you won't fall. We can do it together – ready?" And they held hands and jumped off together! Taking a risk with a friend is easier than going it alone and doing it through play is a great way to learn.

Reflection

In this case study we see Marissa acting as the more knowledgeable other. Consider the following:

What was the role of the adult in this scenario?
How do you empower children to assess and manage risk?

War and Weapon Play

In the midst of war, injustice and real-world violence on our doorsteps, weapon play is a difficult subject to broach, but as children process information and make sense of the world around them through play (Pugmire-Stoy, 1992), it is inevitable that play may become violent. It is important therefore, that we understand how children understand concepts such as killing and death from a developmental perspective and recognise the negative impact a zero-tolerance approach could have on our children (Holland, 2003).

Panagiotaki et al. (2018) suggests that understanding the concept of death consists of five main components:

- Inevitability - we will all die one day;
- Universality - death applies to all living things;
- Irreversibility - it is permanent;
- Cessation - when we die our normal physical functions will cease;
- Causality - it is a product of cause and effect.

Children under three are unable to understand what being dead means, however, the older the child, the greater their level of understanding. For example, five-year-olds can understand that death is inevitable and irreversible, 6 -7-year-olds can understand about universality and cessation but children might not understand the causality component until they are nearly 10-years old (Panagiotaki et al., 2018). This fits with the idea that children learn at different rates (DfE, 2024), making it difficult to generalise about their levels of understanding. In the light of this, we cannot assume that young children fully grasp what words like 'kill', 'dead' and 'die' mean and therefore we must not be concerned if children are using them in their play.

It could be argued that understanding killing is different to understanding death, however, killing and death cannot be separated from each other and the narrative of killing is commonly observed within our children's play. Hughes (2002) identifies this as 'Deep Play' as children encounter difficult themes, survival skills and potentially life threatening scenarios. As educators we can use their play as an opportunity to explore these difficult concepts and not shy away from helping them gain an understanding of this difficult concept. Often, when children engage in superhero play, they are playing with the concepts of killing and death, winning and losing, goodies and baddies, good versus evil which can provide a useful introduction to this subject (Grimmer, 2019).

In the UK knives rather than guns are the weapon of choice, being used in 46% of homicides in England and Wales in 2023/24, whilst guns were used in just under 4% of cases (Statistic, 2025). Our approach within early childhood to using knifes is usually to teach children what knives are for and how to use them safely. We use real knives when cutting fruit or whittling within Forest School or have pretend knives in the role play corner. We role-play the safety elements of using knives, reminding children they are sharp, just as we would role-play using oven gloves to take a cake out of our play kitchen. When considering weapon play within our practice, Grimmer (2019, p.27-28) reminds us: "When a wrapping paper tube becomes a sword, sticks become bows and arrows and torches become laser guns, banning weapon play is rather tricky! Many children can skilfully turn anything into a weapon and this creativity should be encouraged not banned." Holland (2003) suggests we remain child-centred and look beyond the weapon to the child and the narrative of their play.

Case Study

Let's think about this issue from the perspective of a child and use the analogy of a robot or fairy:

Johnny has a fascination with robots and turns everything he makes into a robot. Enid, his key person, doesn't like robots, telling him that robots are not an acceptable thing to make at the setting.

Sinead has a fascination with fairies and turns everything she makes into fairies. Enid, her key person, likes fairies and incorporates her interest into the sessions, encouraging her to make more fairy things in the setting.

(Case study and reflection used with permission from Tamsin Grimmer's training)

Reflection

How is the practitioner supporting the interests and fascinations of both Sinead and Johnny?

Is this equality of opportunity for both Sinead and Johnny?

Do both children feel valued and supported in the same way?

What if we were to substitute the word robot or fairy for gun: Would be feel any different about these case studies?

Rough and Tumble Play

Rough and tumble play is very physical and active play and could involve actions such as wrestling, tickling, pinning others down, pouncing, climbing or sitting on each other, 'bundles' and chasing games like 'tag' and 'it'. Jarvis and George (2010) talk about rough and tumble play as being vital for healthy child development and Huber (2017) insists that children need rigorous physical play incorporated into their day. It could be argued that play fighting is also a form of rough and tumble play. When observing children playing in this way, there will often be lots of giggling and laughing and you will see children smiling and grinning, you may also observe some pretence and imaginative storytelling (Grimmer, 2019). There may also be a show of strength and physicality that could make adults uncomfortable but play does not always need to be comfortable (Greishaber and McArdle, 2010). Play does not always fall into neat compartments or feminised ideals of what is appropriate and this does not mean it should be stopped.

There are many benefits to rough and tumble play, for example, it helps to develop physical skills, proprioception, social competence, self-regulation, empathy and helps children to manage risk and aggressive feelings in a safe environment (Huber, 2017). Despite these benefits, many early childhood educators do not feel comfortable with this play. There are usually several anxieties that educators express when responding to rough and tumble play: Firstly, they fear that if a child gets hurt or upset, they may be blamed for allowing this play to happen, secondly, they feel that this type of play is not effective practice and therefore shouldn't be encouraged and thirdly, they are concerned that rough and tumble play will lead to real fighting and violence. Although understandable, these fears often result in children not being allowed to play in this way, which limits their play and is ultimately unhelpful in terms of their development.

Grimmer (2019, p.26) offers the following ideas to help distinguish between rough and tumble or aggressive play and real violence:

- Watch body language and facial expression – are their eyes smiling or are they frowning?
- Listen for laughter, play shouting and giggling, not crying or screaming in pain. Play tends to include higher pitched voices and violence a lower tone and angry sounding words.
- Closely observe the play, listen to any words spoken – is there a narrative? Are the comments personal?
- Are all children consenting to this play and willingly joining in?
- Are there positive rewards for all players – i.e. this is not bullying when one child dominates the play.
- Do stronger children sometimes allow their opponents to win?
- Closely watch the contact: is it unrelenting, hard and harsh (violent) or relatively gentle and playful?
- Do children sometimes change roles or take alternate roles? For example, the chaser starts to be chased.
- Do the children know each other well? Rough and tumble promotes attachments – children tend not to rough and tumble with strangers!
- Count the number of children involved. Violence tends to involve two children, rough and tumble or aggressive play can incorporate several children at once.
- Violent acts often draw a crowd whereas aggressive play does not draw spectators in the same way.
- Ask the children – most children know that rough and tumble or aggressive play is not real fighting. They will tell you if things go too far.

Schematic Play

Many children regularly engage in repetitive play that could be described as schematic (Louis, Beswick and Featherstone, 2013; Grimmer, 2017) and when they notice children playing in these ways, early childhood professionals usually use the children's fascination with particular movements or actions to support and extend their play and therefore their learning. For example, if we identified that a child has a keen interest in rotation, we may offer them plenty of opportunities within our continuous provision for children to play with balls, tyres and objects that rotate, we can ensure that there are opportunities which would link in with rotation, for example, sharing books which link with this interest – such as 'Wheels' by Shirley Hughes, or incorporating tyres into our construction area, offering spinning tops for children to explore and investigate.
We may notice or get frustrated by children repeatedly playing in particular ways and sometimes their urge to do these things is very strong. Many common behaviours that frustrate us or are challenging to respond to are actually schematic (Grimmer, 2017; 2022). Nutbrown offers a potential solution as she explains, 'Many professional educators use what they know of schemas to divert children from disruptive activities and to focus them on more worthwhile endeavours' (Nutbrown, 2011, p.22) so we can use our understanding of their schematic interest to tempt them to play elsewhere.

Common challenging and playful behaviours that are probably schematic include:

- Throwing toys and resources (trajectory movement)
- Mixing sand and water, or mixing their food and drink (transforming materials)
- Knocking down towers (trajectory movement and disconnecting)
- Emptying containers (containing)
- Pulling tissues out of tissue box (trajectory movement)
- Climbing on and jumping off furniture (trajectory movement and orientation)
- Lining up resources or having to have them positioned in a particular way (positioning and orientation)

We need to move beyond just schema spotting and really unpick what children are fascinated by and how they are engaging in their play. Grimmer (2022) suggests early childhood professionals should become 'behaviour detectives' by observing and noticing what are children are doing, saying, how they are behaving and reflecting upon what this means. Asking questions such as, 'What are they communicating to us through playing in this way?' And 'Could this behaviour be schematic?' helps us to consider the potential causes or underlying needs. All behaviour, including schematic behaviour, is a form of communication.

Key messages

- All behaviour, including playful behaviour, is a form of communication;
- The benefits of risky play outweigh the potential risks;
- Look behind the weapon to the child holding it (Holland, 2003);
- Distinguish between aggressive or rough and tumble play and violence;
- Reinterpret behaviour in the light of play schemas (Grimmer, 2022).

Reflection

Are any of your children's playful behaviours being misinterpreted?

How can you support their play and playful behaviour?

Chapter 14: The Future of Play

Play Matters: Now and Always

As we reach the end of this document, one message remains clear: play is not a luxury, nor is it an afterthought in early childhood development: Play is a fundamental right, a necessity and a powerful force that shapes the minds, hearts, and futures of young children. Throughout these pages, we have explored the richness of play from birth through early childhood, uncovering its deep connections to learning, emotional wellbeing, creativity and social development.

As early childhood professionals, caregivers, policymakers, and advocates, we have a collective responsibility to ensure that play remains central to the lives of young children. This means moving beyond words and translating our understanding into action.

The Power of Play in a Changing World

In a rapidly evolving world, where digital influences, structured learning, and academic pressures often overshadow the natural rhythms of childhood, we must work to protect and promote play. The research, case studies, and expert contributions throughout this document reinforce that play is not just about entertainment, it is about exploration, resilience, problem-solving, and self-expression.

Children today face unique challenges, from increasing screen time to reduced access to outdoor play spaces. As adults, we must be intentional about creating environments that encourage free play, curiosity, and the freedom to imagine without constraint. Whether in nurseries, schools, homes, or communities, the principles of playful learning should be embraced and embedded into everyday practice.

Advocating for Play

The responsibility to advocate for play lies not just within early childhood settings but across society. We urge educators, parents, policymakers, and community leaders to:

1. Prioritise Play in Policy and Practice: Ensure that play-based learning is recognised in curricula and educational frameworks, reinforcing its essential role in early childhood development.

2. Create Play Rich Environments: Design early childhood settings, schools, and community spaces that celebrate and facilitate high quality, child led play.

3. Champion Play for All Children: Advocate for inclusive play opportunities, ensuring that children with diverse needs and backgrounds have equitable access to play.

4. Recognise Play as a Right: Uphold the UN Convention on the Rights of the Child, which identifies play as a fundamental right, and challenge policies and practices that restrict play.

5. Empower Parents and Caregivers: Provide families with knowledge and resources to support play at home, making it a natural and joyful part of daily life.

A Call to Reflect and Reimagine

As we conclude this document, we invite you to reflect on your role in fostering a play filled world for children.

- How can you integrate more play into your practice?
- How can you challenge misconceptions about play in early education?
- How can we, as a society, ensure that play is not lost to increasing demands for structure and measurable outcomes?

Play is not just a part of childhood, it is childhood itself. It is the language through which children learn, connect, and make sense of the world. Our role is not to dictate play but to facilitate it, protect it and celebrate it.

Let us commit to ensuring that play remains at the heart of early childhood, shaping futures filled with curiosity, creativity, and joy.

BECAUSE PLAY MATTERS, NOW AND ALWAYS.

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Glossary

Active Learning: An approach where children are actively engaged in exploring and interacting with their environment to build knowledge.

Attachment: The emotional bond between a child and caregiver that influences social, emotional, and cognitive development.

Autonomy: A child's ability to make independent choices, fostering confidence and decision-making skills.

Cognitive Development: The process of growth in a child's thinking, reasoning, problem-solving, and understanding.

Early Childhood Professionals: Adults who care for young children aged between birth and eight years in a professional capacity, including teachers, childminders, nursery, preschool or kindergarten staff.

Early Years Foundation Stage (EYFS): The statutory framework setting standards for learning, development, and care for children from birth to five years in England.

Executive Function (EF): Cognitive processes including working memory, flexible thinking, and self-control, essential for managing behaviours and learning.

Free Play: Unstructured, child-initiated activities that allow for creativity, exploration, and self-expression without adult-imposed goals.

Holistic Development: The comprehensive growth of a child encompassing physical, emotional, social, and cognitive domains.

Imaginative Play: Play that involves creativity and role-playing, helping children explore scenarios and develop problem-solving skills.

Intersubjectivity: The shared understanding and communication between individuals, crucial in early interactions and learning.

Loose Parts Play: A play approach using materials that can be moved, combined, and manipulated to encourage creativity and problem-solving.

Neural Networks: The interconnected pathways in the brain that develop through experiences, influencing learning and memory.

Pedagogy: The method and practice of teaching, particularly as it relates to educational theory and strategies.

Glossary

Physical Development: Growth in physical abilities, including motor skills, coordination, and overall health.

Play Environment: The physical and emotional setting that supports and encourages play activities.

Play Therapy: A therapeutic approach using play to help children express emotions, process experiences, and develop coping skills.

Schema: A cognitive framework or concept that helps organise and interpret information in the brain.

Self-Regulation: The ability to manage emotions, behaviours, and attention, crucial for academic and social success.

Serve and Return: Interactive communication where an adult responds to a child's cues, fostering language and social development.

Social-Emotional Development: The process by which children learn to understand and manage emotions, develop empathy, and build relationships.

Spontaneity: The natural, impulsive, and creative aspect of play, crucial for fostering joy and innovation.

Symbolic Play: Play where objects, actions, or ideas represent other objects or concepts, enhancing language and cognitive skills.

The Playful Brain: A concept describing how play influences brain development, learning, and emotional wellbeing.

Working Memory: A cognitive system responsible for temporarily holding and manipulating information necessary for complex tasks.

Zone of Proximal Development (ZPD): A Vygotskian concept describing the difference between what a child can do independently and what they can achieve with guidance.

Play Matters Early Years Sector Partners

Assure Education – www.ruthswailes.com

Bright Horizons – www.brighthorizons.co.uk

Childminding UK – www.childmindinguk.com

Early Childhood Studies Degrees Network – www.ecsdn.org

Early Years Alliance – www.eyalliance.org.uk

Early Years Reviews – www.early-years-reviews.com

Early Years Wales – www.earlyyears.wales/en

Edge Hill University – www.edgehill.ac.uk

Keeping Early Years Unique – www.facebook.com/groups/548117901996416

Kinderly – www.kinderly.co.uk

Linden Learning – www.lindenearlyyears.org

National Education Union NEU – www.neu.org.uk

Norland College – www.norland.ac.uk

Nottingham Trent University – www.ntu.ac.uk

Professional Association For Childcare and Early Years (PACEY) – www.pacey.org.uk

Reception Class Teacher Network – www.uea.ac.uk/groups-and-centres/projects/joyce-morris-early-years-literacies-forum/reception-class-teachers-network

Siren Films – www.sirenfilms.co.uk

Sightlines Initiative – www. sightlines-initiative.com

St Mary's University, Twickenham, London – www.stmarys.ac.uk

TACTYC – www.tactyc.org.uk

The Old Station Nursery – www.theoldstationnursery.co.uk

The Voice of Early Childhood – www.thevoiceofearlychildhood.com

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