

Outdoor  
BLOCK  
PLAY  
with 2-3-  
year-olds:  
Froebelian  
THEMES &  
REFLECTIONS



Alex Powell  
and Becci  
Goulding



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# Background & Context

Cardiff Flying Start is a Welsh Government initiative that offers funded part-time childcare for 2–3 year olds living in some of the most deprived areas across Wales. The service aims to provide children and their families with opportunities and experiences they may not otherwise access. We chose our project setting because it has a well-established outdoor area that is both valued and well used. Practitioners understand the benefits of outdoor learning and embraced the opportunity to explore block play in this environment, enhancing children's learning and development through high-quality, open-ended resources





# Setting the Scene

## Outdoor Block Play: Enhancing Exploration, Problem-Solving, and Collaboration in Early Years

- The project aimed to investigate how outdoor block play supports children's development, particularly in comparison to indoor block play.
- It focused on understanding whether outdoor environments offer greater freedom, movement, and opportunities for exploration.
- By introducing large, interlocking blocks into a Flying Start setting, the project examined how children collaborated, overcame physical challenges, and engaged in problem-solving.
- A key objective was to promote Froebelian principles by guiding practitioners to support child-led play through sensitive, well-timed adult involvement.



# Research Methodology

The project used qualitative research methods:

- Observations
- Learning stories
- Time sampling techniques

to capture the richness of 24 2-3 year children's experiences in outdoor block play.

6 practitioners received training grounded in Froebelian principles, with a focus on:

- The role of enabling adults
- Supporting 2-3 year old children's independent exploration and creativity

The child's voice was central, supported through:

- Active listening
- Attentive responses to non-verbal communication
- Opportunities for reflection

Ethical considerations were carefully addressed, including:

- Informed consent
- Safeguarding protocols
- Commitment to inclusive practice



# Action Research Cycle



# Action Research Cycle

This project followed an iterative action research approach, allowing practice to evolve through reflection, evidence, and Froebelian Principles.

## **Preparing for Action Research** *(April 2024 – July 2024)*

Approached a childcare setting

Initial observations and professional dialogue highlighted differences in children's freedom, engagement and sustained block play in indoor and outdoor

Created reflection sheets and shared the project aims with our team members who were supporting the observations

## **Establishing the project** (September – December 2024)

Blocks arrived and children set the area

Initial observations and professional dialogue highlighted differences in children's freedom, engagement and sustained block play in indoor and outdoor

Provided training for practitioners

## **Plan for change** (January – March 2025)

Agreeing small, manageable changes to block play provision. Methods of transportation added.

Planning adjustments to adult involvement and use of space

Ensuring changes were realistic and sustainable within Flying Start settings



# Action Research Cycle

## **Reflect and Review (April – June 2025)**

- Practitioners and researchers reflected on what had changed and why?
- Consideration of factors that supported or limited children's freedom in play
- Links made to Froebelian principles and curriculum expectations

## **Refine Practice and Plan Next Steps (July 2025)**

Primary summary of the Block Play project. Including a collation of the reflections and observations that had been completed over the past 10 months

## **Final Observations, Findings and Conclusions (September – December 2025)**

- Drawing together practitioner reflections, child voice and photographic evidence
- Identifying key findings and themes

## **Reporting and Dissemination (January 2026)**

Analysis of findings completed Action research report written and submitted to the Froebel Trust





## Introducing the blocks & setting the Area

The outdoor blocks were a brand-new resource for the setting. From the outset, children were actively involved in the process—unpacking, exploring, and setting up the blocks themselves. This approach was intentional, aiming to give children a sense of ownership and agency.

- Blocks were initially arranged by size and shape in a large, covered area next to the outdoor environment
- This setup offered a structured starting point for children's exploration
- Ongoing observations showed the need for extended space
- Children's play was mainly horizontal building, which highlighted the limitations of the original layout.





## Introducing the blocks & setting the Area

- The team became more curious about how play might change if the blocks were made mobile and used across the wider outdoor area.

This shift aimed to encourage:

- More dynamic and expansive play
- Exploration of spatial concepts
- Collaboration between children
- Increased creativity in how children used the blocks



# Indoor/Outdoor Block Play

## Indoor Block Play

Indoors, practitioners observe that block play benefits from:

- Intentional organisation of the environment
- Clear boundaries for play
- A full range of well-maintained block resources
- Conditions that support children's focus, precision, and increasingly complex constructions
- Alignment with Froebel's principles of order, beauty, and respectful presentation of materials (Froebel, 1887; Bruce, 2021)



# Practitioners also note challenges in indoor block play:

- Limited physical space restricts children's creativity
- Expectations around noise levels can limit play
- The need to keep areas tidy can prevent ambitious or large-scale building projects



Indoor  
Block  
Play

# Outdoors, practitioners observe a shift in children's engagement:

## Outdoor Block Play

- Increased space supports whole-body movement and physical exploration
- Greater opportunities for collaboration and imaginative play
- Children draw on the wider natural environment in their play
- This aligns with Froebel's emphasis on nature as a powerful educational force and children's right to explore physically and socially (Froebel, 1903; Tovey, 2017)



## Practitioners notice children:

- Taking more risks
- Negotiating roles with peers
- Incorporating natural loose parts into constructions

## Outdoor Block Play



## Challenges of outdoor block play include:

- Need for more durable resources, with associated cost implications
- Weather-related limitations
- Less consistent organisation of materials compared to indoors
- These factors can affect continuity of learning and child independence when revisiting ideas (Nicolopoulou, 2010)

## Outdoor Block Play



# Across both environments, practitioners value block play for:

- Supporting mathematical thinking
  - Developing problem-solving abilities
  - Enhancing communication and language skills
  - Empowering children through meaningful, hands-on learning experiences
- (Hansel, 2015; Brooker & Woodhead, 2013)



# The Differences Indoor and Outdoor Block Play

Our research showed clear differences in children's block play across environments:

Indoors: Organised spaces with clear boundaries and full sets of blocks help children focus and create complex structures, reflecting Froebel's principles of order and beauty (Froebel, 1887; Bruce, 2021).

However, limited space, noise rules, and tidiness expectations can restrict creativity and large-scale builds.



# The Differences Indoor and Outdoor Block Play

Outdoors: Greater space encourages movement, collaboration, and imaginative play using natural materials, supporting Froebel's emphasis on nature and exploration (Froebel, 1903; Tovey, 2017). Children take more risks and negotiate roles, but challenges include resource durability, weather, and less consistent organisation, which can affect continuity (Nicolopoulou, 2010).

Across both indoors and outdoors: Practitioners value block play for developing mathematical thinking, problem-solving, and communication (Hansel, 2015; Brooker & Woodhead, 2013).



# Adult Presence and Sensitive Pedagogy

Observations frequently highlighted the need for adults to encourage, be present and collaborate with the children whilst they engaged in block play.

## Adult observation

I noticed a child nearby with a car so encouraged him in by drawing attention to the ramps. A second child joined but would not attempt to move the blocks but guided me as to where to put each piece.

He was then joined by a third child who managed to lift some of the blocks, however, on a few occasions asked for help as he said they were 'too heavy'. Once the structure was built, they took turns to push cars down the ramp until one child decided to try and slide himself down there.

This then led into the children climbing on the structure and jumping off.





# Children's Connection with the Environment



- The design and placement of block areas strongly influenced children's engagement.
- Visible, accessible, and inviting block areas encouraged deeper, longer-lasting play.
- Outdoor block areas that were hidden or isolated were used far less frequently.
- Children often repurposed blocks for gross-motor play, such as climbing, balancing, and jumping.
- Blocks were also adapted into furniture and props for imaginative and small-world play.





# Children's Connection with the Environment

These behaviours reflect Froebel's principle that children build strong connections to place and nature through open-ended, meaningful materials. Regular review of block-area organisation is important to ensure it remains welcoming, well-presented, and offers open invitations to explore. Settings should consider whether making blocks transportable could further support flexible, creative, child-led play.



A child approached the blocks that located in the main space of the outdoor area. The child began by stacking two blocks, then carefully stepped onto them, testing their stability. After a moment of balance, they jumped off with a delighted laugh and repeated the process several times. Later, the child moved a few blocks to a shaded corner, arranging them in a line and sitting on them as if they were seats, inviting another child to join. The blocks then became a train.

# Symbolic Play & Storytelling

P – 'What shall we build' C – 'A river'

P and C used long flat blocks to create a river. Another P provided fish to swim along the river and encouraged the child to jump over the structure. P and C raced the fish along the 'river'.

Another child brought trains to the area and P encouraged them to use the blocks to build a tunnel. P modelled appropriate mathematical language (adding more, discussing length) and 3 children were pushing the trains through the tunnel. A child then added a piece of wooden train track on top of the structure, and this was added to create a longer line for the train.

P = Practitioner C= Child



# Symbolic Play & Storytelling

Like the previous observation, we observed many moments like the above where blocks became homes for spiders, rivers for fish, tunnels for trains, or characters in family stories—Mummies, Daddies, and Babies. These rich, imaginative scenarios illustrate Friedrich Froebel’s belief that *“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”* (Froebel, Froebel's Chief Writings on Education, 1912).

**Symbolic play and storytelling were most sustained when adults were present to listen attentively, model language, and offer gentle prompts that extended children’s ideas and deepened their engagement.**



# Risk Taking & Autonomy



Child A initiated play by attempting to stack the larger 8-hole blocks. When another child commented on their weight being too heavy, the practitioner suggested they switch to the 4-hole blocks, as these were lighter to lift. Responding to the guidance, both children selected the lighter blocks and continued to build their structure.

As it grew taller and began to lose stability, the practitioner guided them to build an alternative wall for their design. Child A then ran off and fetched a sweeping brush and propped it against the wall, seemingly as a support for the wall. During a conversation with child A's mum on the next visit to setting it was discovered that child A had helped his dad in the garden following a recent storm, by using wooden posts to prop up their fencing.

# Risk Taking & Autonomy

## The previous observation showed:

- Children used outdoor blocks to test physical limits through balancing, climbing, and jumping.
- This risk-taking supports physical confidence, coordination, and self-challenge.
- Froebel’s “freedom with guidance” was evident: children thrived when boundaries and adult support were clear.
- Guidance needed to come before freedom to ensure safe, confident exploration.
- Early modelling, encouragement, and safety cues enabled children to take calculated risks independently.



# Ethics and The Child Voice

The study ensured ethical consent and valued children's verbal and non-verbal communication as learning.

## Children's Expression

Children communicated their thoughts and feelings through verbal and non-verbal cues during play.

## Collaborative Play

Children worked together building ramps, tunnels, and obstacle courses, enhancing social skills.

## Symbolic and Risk-Taking Play

Children engaged in symbolic play and embraced risk-taking by climbing and problem-solving.

## Active Listening and Reflection

Practitioners documented play and responded to children's cues to support learning.


Child D  
"Can you help me build a castle Kayleigh? A castle for the dinosaur. a tall tower. I need your help"





# Key Findings

- Children's block play reached its fullest potential when practitioners were actively present, modelling, encouraging, and knowing when to step in or step back.
- When practitioners joined play as thoughtful companions rather than directors, children extended their ideas: building taller, experimenting with interlocking features, and adding rich symbolic elements like rivers, trains, and enclosures. This aligns with Froebel's view of adults as co-constructors of learning.
- Our observations showed that children often sought reassurance or inspiration, especially during complex or imaginative scenarios.

# Recommendations for Practice

 Practitioners should feel confident to 'be a companion' in block play, balancing gentle guidance with freedom, to support children's agency and creativity.

 Practitioners should provide clear guidance and boundaries before offering freedom, creating a safe and supportive environment where children can confidently explore physical challenges and take calculated risks through open-ended play.

 The size, weight and location of the blocks should be considered when working with 2–3-year-olds, this will support children's choice and ability

# Final Thoughts & Conclusions

Our collective findings indicate that a balanced approach, ensuring high-quality block play provision indoors and outdoors, alongside professional development to increase staff confidence – will support children to fully realise the affordances of both environments.

This approach honors Froebelian principles and strengthens the Flying Start commitment to enabling children to explore, experiment, and create with freedom and purpose.



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