



Research Insights Cards

Birth to Three

A summary of evidence from
Froebel Trust funded projects

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About the Research Insights

This series aims to draw together evidence from projects funded by the Froebel Trust. It summarises key insights for anyone with an interest in early childhood education and care.

Each insight has been developed using a common approach:

- A search for relevant research and practice development projects funded by the Froebel Trust
- Review and analysis of all projects outputs using a quasi-systematic approach by an independent researcher (based on Gill, 2011)
- Synthesis of evidence and presentation of key insights

A full companion report of the research behind these insight cards is also available.

This is an interactive document

Hover and click on the **links in bold** to access references or information.



1. How babies initiate connection

Babies are active and competent communicators. They proactively initiate connection rather than merely reacting to cues, but these are not always noticed.

“subtle initiations...get lost within daily rapidity of nursery life”

(Guard, 2023a)



Look at the photo. Think about what is supporting this moment of connection.



How babies initiate connection

What the research tells us

Babies adopt a wide range of communication methods and are willing to work hard to meet their need to connect ^(1,2).

- Video recordings of mother-baby interactions showed babies as young as a few weeks old not only respond to maternal cues but intentionally initiate and sustain communication ⁽¹⁾.
- In nursery settings, babies demonstrate similar intentionality, persistence and competence in their communication. A study of babies aged 4-11 months showed the ways they adjust their strategies dynamically, depending on whether the adults around them are available to communicate ^(2,3,4).

Close observation of everyday interactions reveals a pattern of communication babies tend to adopt ^(2,3,4). They:

- observe adults closely, often in silence and will seek eye contact to draw adults into a connection
- use facial expressions and body movements
- speak through coos, babbles and laughter
- may offer a gesture or a toy
- cry

Find out more:

1. [Eirinaki \(2022\)](#); 2. [Guard \(2023a\)](#)
3. [Guard \(2023b\)](#) 4. [Guard \(2025\)](#)

Download our **Thinking about babies** Guidance for Leaders and Managers of Early Years Settings



Educator responsiveness and emotional availability matters. Take time to notice babies' unique communication cues and preferences.



2. The significance of singing

Song is an important relational tool for babies and toddlers, particularly in the pre-verbal stage. It promotes connection, closeness, communication and confidence.

“Singing can facilitate intimacy; supports language development; can be a means to improve relationships with families; and enhances the wellbeing of practitioners during their working day”

(Powell et al, 2013)



Look at the photo. Think about when, how and why you use song.



The significance of singing

What the research tells us

Song is a spectrum ranging from spontaneous melodic vocalisations and “motherese” to structured songs.

- Babies enjoy song! Educators report that singing leads to qualitatively different interactions than talk and a shared sense of joy. Babies respond to singing with heightened engagement, demonstrated through eye contact, smiles and movements ^(1,2,3).
- Whilst singing is often used as a functional tool to distract, calm, soothe or manage, it also offers an important means of building emotional closeness and connection for babies ⁽¹⁾.

- Singing with others supports musical development by providing opportunities for turn taking and shared rhythm. Video analysis of babies and toddlers at home found a sense of playfulness, shared musical culture, choice and repetition were important in encouraging musical engagement ⁽⁴⁾.

Find out more:

1. [Powell et al. \(2013\)](#)
2. [Powell & Gooch \(2015\)](#),
3. [Young et al. \(2022\)](#), 4. [Voyajolu \(2021\)](#)

Download our pamphlet,
[Singing with young children](#)



Think about how you could integrate spontaneous singing, lullabies, rhythmic play, and face-to-face sound imitation throughout the day.



3. Bridging the communication gap

The relationship between family and setting is of paramount importance because babies and toddlers enter nursery with established communication patterns and preferences.

“Parents [...] are the experts on their children, and all the details that they know can make a difference to the ways their children relate to a new setting”

(Elfer et al, 2018)



Look at the photo. Think about how you welcome new families and what you know about the everyday lives of the very young children in your setting.



Bridging the communication gap

What the research tells us

Sharing how a baby communicates at home helps educators understand the communication preferences of the children they are working with, while setting insights enrich family understanding ⁽¹⁾.

- Limited information exchange between nursery and families can leave parents and carers feeling uncertain about setting routines, and less likely to share insights about their home environments ⁽²⁾.
- The invitation to share family songs with a setting can spark curiosity and dialogue about home cultures and act as a powerful relational bridge ⁽³⁾.

“During the Babysong Project, we became increasingly aware of the potential for ‘song’ to go beyond the setting to provide meaningful ways of making connections between baby rooms [...] and the families and cultures of the infants in their care.”

(Young et al, 2022)

Find out more:

1. [Guard \(2023a\)](#), 2. [Elfer et al. \(2018a\)](#), 3. [Powell & Gooch \(2015\)](#) 4. [Young et al. \(2022\)](#),

Download our pamphlet [Connecting with parents families and communities - a starting point](#)



Understanding home communication patterns and preferences (including singing) supports settling and transitions.



4. Learning to care

It is through warm, responsive relationships with educators that children learn what it feels like to be cared for and what it means to care for others.

“infants and toddlers learn to be the one-caring in the very context of being the cared-for”

Cooper and Quiñones (2020)



Look at the photo. Think about what is happening in this interaction.



Learning to care

What the research tells us

The foundational relationships young children form with their caregivers shape their sense of self, others and the world. As such, they are inherently pedagogical.

- One-year-olds initiate nurturing acts, such as feeding, rocking and soothing, in their play with dolls that mirror their own experience of being cared for.
- This shows how the care received in responsive relationships with educators is internalised by toddlers and subsequently offered in relation to others.
- Toddlers offer invitations, which are often subtle, for educators to join them in care play. When educators notice and respond by joining in and helping to shape the play narrative, they extend the child's understanding of care.

“Having their caring actions validated through verbal and non-verbal prompts, storying, and gentle support [...] gave the toddlers opportunities to act, think about, and extend their ideas about being the one caring.”

Cooper and Quiñones' (2020)

Find out more:
[Cooper and Quiñones \(2020\)](#)



Look out for the non-verbal cues, body gestures or movement toddlers use to share their understanding of 'caring for' through their play.



5. Cultures of care

The ways in which we look after babies and toddlers are strongly shaped by cultural factors at the individual, setting and national level.

“meaningful pedagogy with very young children is a culturally-specific phenomenon”

(Cooper et al, 2022)



Look at the photo. Think about the values it reflects and what it makes you feel.



Cultures of care

What the research tells us

Cultural values can influence care practices in both homes and nursery settings.

- A study of care practices for one-year-olds in England, USA, New Zealand and Hong Kong found significant differences in pedagogy and practices across the four contexts. For example, Hong Kong settings often used more structured adult direction during everyday routines, such as mealtimes. In New Zealand, looser, child-led flexibility was prioritised ⁽¹⁾.
- Cultural values about nature influence care practices such as sleeping. In Finland for example, where spending time in nature is highly valued, it is common for babies to have their daytime sleeps outdoors ⁽²⁾.

- The organisational culture of early childhood settings can strongly influence how very young children are cared for and whether there are opportunities for relational, responsive care giving. Adult driven practice can overshadow young children's emotional needs and generate internal struggles for educators ⁽³⁾.

Find out more:

1. [Cooper et al \(2022\)](#)
2. [Kemp et al. \(2025a\)](#)
3. [Guard \(2023a\)](#)



Cultural norms and values may be passed on to babies and toddlers through care practices. It is therefore important to reflect on and question these everyday routines.



6. Being with babies outdoors

Despite the diverse learning, development and wellbeing benefits of regular access to natural environments, babies and toddlers are often excluded.

“Contrasted to Froebelian understanding of the importance of time spent from birth ‘with the clear, still objects of nature’ contemporary outdoor provision seems both limited and limiting.”

(Josephidou & Kemp, 2024, p.15)



Look at the photo. Think about what this interaction is offering the baby.



Being with babies outdoors

What the research tells us

Being outdoors and in nature is often seen as less of a priority for babies and toddlers than for older children. The outdoors is valued primarily as a place to be physically active; one that is seen as most relevant for children who can walk and run ⁽¹⁾.

- There are significant inequalities of access to high quality, natural environments for babies and toddlers, both in home and setting contexts. A national survey of babyroom parents found that almost a third do not have access to a private garden. Many parents rely on settings to provide regular outdoor access ⁽³⁾. However, an online survey of outdoor provision in English babyrooms found marked variability in both quality and quantity ⁽²⁾.

- Most babies and toddlers have limited opportunities to engage with nature whilst attending a setting. Nature is considered to be 'risky', meaning that natural elements are often removed resulting in an absence of grass, plants or trees. The outdoor spaces in babyrooms tend to be artificial, flat and bounded ^(4,5).
- Even in challenging urban contexts, it is possible to develop nature based pedagogies that support the wellbeing of the youngest children and the environment ^(5,6,7).

Find out more:

1. [Kemp & Josephidou, \(2023a\)](#)
2. [Josephidou et al, \(2021\)](#). 3. [Kemp et al. \(2025a\)](#)
4. [Kemp et al, \(2024\)](#); 5. [Kemp & Josephidou, \(2023b\)](#) 6. [Josephidou & Kemp, \(2024\)](#)
7. [Kemp et al., \(2025c\)](#)

Download the Froebelian inspired **babyNENE toolkit** for babyroom educators



You don't have to 'do' activities – just 'being' outdoors can be valuable and enjoyable for both babies and adults.



7. Why slow matters

Slowing down creates space to notice the small cues, gestures and meanings that are easy to miss in a busy setting.

“ watchful and empathetic pedagogy of attention [...] takes its lead from children and helps them to amplify or modulate their own actions and capacities.”

(MacRae & MacLure, 2021)



Look at the photo.
Think about this
child's movement.



Why slow matters

What the research tells us

Research using innovative methodologies shows how much is missed when the pace is fast and, conversely, how much more can be observed by slowing down.

- In one study of two-year-olds, video footage was slowed down to reveal the often imperceptible and embodied ways very young children move. For example, watching a two-year-old's repeated jumps in slow motion revealed tiny hesitations, knee bends, toe grips, subtle foot repositioning on each landing. Such small movements matter because they demonstrate a sensory form of knowing ⁽¹⁾.
- In another study, dialogues between babies and educators were captured by video and then discussed. It found that educators want to be slow and still

with babies yet feel pressured to 'keep moving' ⁽²⁾. 'Adagio interactions' offers a way of thinking about how to be slow during close interactions with babies. The concept focuses on the qualities of being present, responsive, intentional and at ease ⁽³⁾.

- An adaptation of the Tavistock Observation Method (A-TOM) for use in early childhood settings enabled educators to get to know more about individual children and better understand them. It revealed micro-moments of joy or distress and brought visibility to children who had previously received little attention. It also highlighted subtle peer interactions ⁽⁴⁾.

Find out more:

1. **MacRae and MacLure (2021)**
2. **Guard (2023b)**
3. **Guard (2025)**
4. **Elfer (2017)**

Download our **Slow Pedagogy Pamphlet**



Visual methodologies can help us to see why slowing down matters. They particularly emphasise the value of immersing oneself in interactions with babies and toddlers and being present, responsive and intentional.



8. The importance of reflection

Reflective pedagogy is particularly important for those working with babies and toddlers but despite its demonstrated value, it remains rare in practice.

“Children’s emotional experiences [...] are intimately bound up with the emotions of practitioners and how practitioners manage these. Professional reflection is one way attention can be given to work interactions.”

(Elfer et al, 2018)



“Emotion and emotional experience are central to interactions in nurseries.”

(Elfer et al, 2018)

Think about your experience and whether you agree with this statement.



The importance of reflection

What the research tells us

Relating to a baby or a toddler can be a source of joy and delight for educators, but the level of intimacy required may also be challenging; containing a young child's dependency is emotionally demanding ^(1,2,3,4).

- Reflective spaces offer educators opportunities to examine and interrogate their own practice and connect with their own emotional experiences and responses ⁽²⁾.
- Work Discussion (WD) groups are an example of reflective spaces that were introduced in one study for educators working with two-year-olds. Impacts include measurable child gains across multiple areas of

development, improved relationships with parents, and educator reports of deeper child understanding and stronger team empathy ^(1,3,4).

- Building on this, Guard (2023) used 'Video Interaction Dialogue' to promote opportunities for educators to 'slow down' their practice with babies. Video footage of interactions with babies was slowed down to allow deeper reflection on practice and to tune into babies' 'hidden voice'.

Find out more:

1. Elfer (2012), 2. Elfer (2017), 3. Elfer et al. (2018a), 4. Elfer et al. (2018b), 5. Elfer (2023)
6. Guard (2023a)

Download The Froebel Partnership's **Reflection with Guidance** tool for developing practice



Both educators, and young children they work with, benefit when settings create and prioritise time and space for professional reflection.



Implications for Educators

Observe closely the babies and toddlers you work with to notice their unique communication cues and preferences.

Take time to learn more about how babies and toddlers prefer to communicate.

Use song as a relational and communicative tool, rather than only as a way to manage and introduce activities.

Be responsive to babies' and toddlers' subtle invitations to join in their care-related play.

Prioritise one-to-one interactions during and beyond routines, like nappy changes or feeding.

Reflect on how your cultural and organisational values shape your practice and be curious about the heritage and values of the families you work with.

Provide consistent year-round access to the outdoors and natural environments even for the youngest children.

Slow down in your practice to ensure communication cues are consistently responded to.

Recognise the emotional demands of working with the youngest children and the value of spaces where educators can reflect on and share their experiences.

Advocate for babies' and toddlers' voices and needs in professional conversations with colleagues, managers, families, and other stakeholders.



Policy Implications

For policy makers, leaders and advisors

Understand the value of Froebelian principles in enabling educators working with the youngest children to articulate and justify their pedagogical choices.

Adopt a rights-based approach, enshrining babies' and toddlers' right to a voice in frameworks and guidance.

Ensure relational pedagogy is prioritised rather than externally imposed outcomes. Even the youngest children should be seen as active agents, able to initiate and contribute to curriculum experiences.

Encourage strong relationships and communication between settings and families to ensure the needs of all children are met.

Protect ratios and mandate key person continuity: Babies and toddlers need sustained one-to-one interactions with responsive, affective educators.



Policy Implications

For policy makers, leaders and advisors

Recognise the relational importance of singing and its affective potential alongside educational purposes and musical outcomes.

Acknowledge the rich and culturally-imbued pedagogical significance of everyday care practices, beyond their practical functionality.

Challenge perceptions that spending time outdoors is less of a priority for babies and toddlers than for older children.

Support the emotional demands of practice by creating and prioritising spaces for professional reflection.

Provide regular, high-quality, in-depth CPD, including the subtle ways in which babies communicate and the significance of responsive adults.



Implications for Researchers

Projects funded by the Froebel Trust have elevated the voices of babies and toddlers by adopting innovative methods to capture their perspectives.

A recurring ethical concern is how to authentically manage assent and be sensitive to the ways babies and toddlers may express dissent.

Collectively, these projects have established the value of video, ethnography and naturalistic observation in capturing previously unexplored aspects of very young children's lives.

Mixed methods are valuable given the complexities and challenges of undertaking research seeking to understand the experiences of the youngest children.

There is potential to further advance methodological innovations.

Sociodemographic details did not receive enough attention in the projects reviewed.

A more diverse geographical and cultural focus would be beneficial for evidencing the wider value of a Froebelian approach.

Insights from research into early years pedagogy should complement, extend and support practice-based knowledge.

Future research could usefully consider:

- The emotional and relational dimensions of babies' and toddlers' experiences in early childhood settings.
- The ways song, play with instruments and musical development are integrated into early childhood pedagogy.
- The diverse social and cultural perspectives/experiences of outdoors and nature (particularly of parents of babies and toddlers).
- Where and how nature-based pedagogy (Birth to Three) is practised in the UK.
- The appropriateness and feasibility of different reflective practice models for scaling up.

