Music and SEND

As shown by a project at a group of settings, music and movement can be vital for children with SEND. By ***Sue Newman, co-founder and director of operations at Boogie Mites***



Boogie Mites runs family sessions for children with SEND

PHOTOS BOOGIE MITES

Neuroscience research increasingly highlights the potential of music and movement in the early years to support children's development and contribute to closing the school-readiness attainment gap.

Our work with Dingley's Promise nurseries has given us an opportunity to explore what this looks like in specialist SEND early years settings. Boogie Mites initially worked with five Dingley's Promise settings to understand how our music methodology could be adapted to support children with a wide and diverse range of needs.

Active music-making engages multiple areas of the brain simultaneously. It can support the development of a wide range of cognitive, physical, social and emotional skills, while strengthening the brain's capacity to learn. Music and movement are much more than fun activities: they provide a powerful, accessible way to support the foundations for learning and school readiness.

For children with special educational needs and disabilities (SEND), music can be particularly valuable. It offers multiple ways for children to communicate, participate and connect, including when conventional language or social communication may be challenging. Music and movement can support:

- Emotional regulation.
- Pro-social connection and shared attention.
- Auditory processing.
- Short- and long-term memory, including auditory, visual and motor memory.
- Sensory and motor integration.
- Rhythmic awareness.
- Communication and language development.

MUSIC AND MOVEMENT: A WHOLE-BRAIN WORKOUT

Hearing is not simply about receiving sound through the ears. Auditory processing describes the way the brain interprets, organises and makes meaning from what we hear, and then uses that information to guide our responses – socially, emotionally, cognitively, physically.

Music provides the brain with a rich combination of rhythm, pitch, timing, repetition, pattern and changes in sound. When children actively sing, move, listen, play instruments and respond to musical cues, multiple neural systems are activated together.

Research from the Brainvolts Auditory Neuroscience Laboratory at Northwestern University found the way we process sound interacts with many of the brain's core functions – how we think, feel, move and integrate our senses.

Brainvolts lead professor Nina Kraus concludes music and movement is particularly powerful because of its 'privileged portal to memory', which retains, retrieves and automates responses to sounds. So, when under-fives join in with a song, copy an action, anticipate a musical cue, move to a beat or play a drum, they are not simply having fun. They are engaging multiple systems that contribute to communication, learning and development.

RHYTHM: A FUNDAMENTAL BUILDING BLOCK

Rhythm is particularly important. The foundations of the human capacity to perceive music are present from very early in life. Typically developing newborns show sensitivity to musical features such as rhythm and beat, suggesting the developing brain can detect and respond to patterns in sound.

Before birth, babies are surrounded by rhythmic information – including the mother's heartbeat. As neuroscientist Roberta Bianco has explained, rhythmic information is a prominent feature of the baby's listening environment in the womb.

From birth, rhythm provides a powerful framework for organising

and predicting what happens next. This matters because the brain is fundamentally a prediction system. It is constantly looking for patterns, anticipating what comes next and using previous experiences to make sense of new information.

Music gives children repeated opportunities to experience precisely these processes.

Rhythmic awareness is also closely connected to communication. The ability to perceive and organise rhythm contributes to speech processing, co-ordinated movement and the ability to understand speech.

Oxford University professor Usha Goswami's research highlights the importance of speech rhythm in early language acquisition, suggesting that individual differences in children's speech processing are related to their ability to perceive speech rhythm.

WHY DOES THIS MATTER?

If rhythmic, auditory, motor and memory networks are important foundations for communication and learning, then providing rich opportunities to develop these systems from birth becomes particularly important.

For some children with SEND, there may be differences in the development or co-ordination of these networks. Crucially, music does not require every child to participate through spoken language. A child might communicate through a look, a gesture, a movement, a vocalisation, a change in attention, reaching for an instrument or anticipating a familiar musical cue. All of these can be meaningful forms of participation. This is one of the reasons music can be so powerful in inclusive early years practice.

FROM NEUROSCIENCE TO PRACTICE

So, how can we strengthen auditory and music-processing skills from birth and maximise the potential lifelong benefits of rich musical experiences? The answer does not require every early years educator or parent to be a musician.

Boogie Mites' neuroscience-informed music programmes are designed to equip mainstream and SEND educators with knowledge, resources and confidence to harness the developmental benefits of active music-making every day.

The approach combines music, movement, repetition, rhythm, interaction and purposeful play to create opportunities to develop communication, social, emotional, cognitive and physical skills.

OUR DINGLEY'S PROMISE PROJECT

There is no single approach that works for every child. Every group is different, whether a mainstream or specialist SEND setting.

However, working alongside Dingley's Promise practitioners has helped us identify valuable principles and adaptations for making daily music provision as inclusive and impactful as possible in a SEND setting.

Our aim was to build the knowledge, skills and confidence of practitioners, enabling them to increasingly deliver purposeful, active music-making themselves.

Across the Phase 1 project, children were observed:

- joining in with actions and movement
- exploring rhythm and instruments
- anticipating familiar musical cues
- communicating through words, sounds, movements, looks and gestures
- developing shared attention
- returning voluntarily to preferred musical experiences.

One of the most important findings was that meaningful participation looked different for every child.

The project reinforced that effective music-making in specialist SEND provision does not depend on every child completing the same activity in the same way. For some children, group music-circle sessions created valuable opportunities to engage alongside others, develop shared attention, practise pro-social behaviours and communicate. For others, the most meaningful engagement happened through individual exploration, movement, instruments, repetition or a preferred sensory experience.

The strongest practice was responsive to the individual child.

POWER OF THE DRUM

Drumming emerged independently as a particularly accessible and engaging activity.

One practitioner said, 'It's great to see children involved with drums and beaters, which is the most popular activity with our children.'

Another observed, 'The children particularly loved the drums and sticks and found it very engaging.'

Drumming provides an immediate opportunity for children to explore sound, rhythm, cause and effect, turn-taking, motor control, anticipation and self-expression – while requiring no spoken language. This can provide a powerful alternative route into shared musical experiences.

We are looking forward to leading projects at five more Dingley's Promise centres and continuing to develop our SEND Music Pedagogy of Musical Moments. The more we learn from practitioners, families and children, the more we understand what truly inclusive music practice can look like.

> **You simply need a repertoire of rich and varied age-appropriate music activities and the confidence to join in**

YOU CAN DO IT!

This is a core part of the Boogie Mites philosophy.

Many educators and families do not consider themselves musical. But you do not have to be a musician to give children meaningful musical experiences. You do not need to sing perfectly, play an instrument or understand music theory.

You simply need a repertoire of rich and varied age-appropriate music activities and the confidence to join in.

Through everyday singing, movement, rhythm, repetition and musical play, adults can create powerful opportunities for children to listen, anticipate, communicate, move, connect and learn. As an added bonus, they will also boost their own development and wellbeing.

Our ambition is to translate the neuroscience evidence into simple, practical and achievable musical experiences that can happen every day – in settings and at home. Because when under-fives engage in active music-making, they are doing much more than making music. They are building connections between sound, movement, memory, attention, communication, emotion and social interaction.

They are developing the foundations for learning. And, for children with SEND, this can be transformational for their early development journey, providing a particularly powerful way to communicate, participate, connect and belong.

→ MORE INFORMATION

- www.boogiemites.co.uk
- Here is a link and QR code to sign up for a month trial of Boogie Mites' 'Bangedy Bang Bang' drumming music activity: https://ex246.infusionsoft.app/app/form/bangedy-bang-bang