

Music, language and autism

Adam Ockelford explains how music can play a part in language development for autistic children

Many children with autism find getting to grips with language a real challenge. They may have difficulties in understanding what words mean, or problems in speaking. They may find it challenging to sense the usual ‘give and take’ of a conversation, and be unsure as to what it is appropriate to say to different people and on different occasions. Yet these same children may enjoy listening to music (of their choice) almost obsessively – often associated with short video clips on tablets, computers or phones that they will play over and over again. They may tap and flick objects and enjoy the ringing sounds that glasses and bowls make. They may hum or sing fragments of songs incessantly.

Why should this be so? Studies of 100s of autistic children at the Applied Music Research Centre at the University of Roehampton in London give us some idea of what may be happening.

Intuitively

For almost all children, the ability to process musical sounds develops very early in the brain. Three months before birth, the auditory system is fully functioning, and babies-to-be instinctively search for repetition and regularities in the sounds that penetrate their mothers’ wombs. By

the time they are six months old, babies can already remember sequences of up to three different sounds, and by their first birthday, they intuitively start to recognise the deeper patterns that give

making music – in the form of vocalising and dancing – may predate the use of language by hundreds of thousands of years. And in all societies today, parents intuitively use a sing-song

maintained in those with delayed development. So a four-year-old, for example, functioning globally at a 12-month level, is likely to have little or no grasp of language, but may be able to follow simple musical structures (such as those found in nursery rhymes) quite well. The second important point is that, for some children on the autism spectrum, language and musical development may be decoupled. So the same four-year-old, although unable to speak, may have no difficulty in singing whole songs, for instance. And beyond this, in around five–10 per cent of cases, autistic children’s musical development may actually exceed the level that one would expect to find.

The four-year-old may have taught herself to play the same nursery rhymes fluently on the piano, for example, using both hands, with tune and accompaniment.

Because music and language are so closely and naturally connected in song, this means that educators have a ready-made approach to assisting children on the autism spectrum whose ability to process or use words is delayed. The advice is simple. Use music whenever and wherever you can.

Relevant

Often, people’s response at this point is to say, ‘But I’m not musical’ or ‘I can’t sing!’

The micro-songs used in Tuning In.



the music of their culture its particular style or ‘feel’. In contrast, children’s grasp of sound used to convey symbolic meaning – that is, words – is still in the starting blocks. In round terms, at this point in their development, children’s ability to process music is around six months ahead of their capacity to understand language. Interestingly, it seems that this disparity reaches far back into human evolution. The latest thinking from anthropologists is that

voice when interacting with their young children, communicating with them spontaneously in a way they instinctively know (without needing to be taught) that their babies will understand.

Structures

What of children on the autism spectrum who have language and communication difficulties? There are two crucial points to bear in mind. The first is that the gap between the capacity to engage with music and language is likely to be

**TRY SOME
OF THESE**

Here are some suggestions for teachers working with autistic children who are in the early stages of language development.

- Start with close observation – does the child indicate preferences in non-verbal ways (for example, by handing an object to adults, or by pushing them away)?
- Does the child vocalise at all – perhaps to express their feelings or in an attempt to block out unwanted sounds?
- Try introducing one micro-song at a time – start with one that enables the child to express what they are most keen to tell you – it may well be ‘No thank you’!
- Don’t be afraid to model the songs yourself – it may take a long time for the child to reciprocate.
- Involve all adults (and peers and siblings) who have contact with the child if you can – the more consistently any form of augmentative form of communication is used, the greater its chance of success.
- For more suggestions or advice, do get in touch – a.ockelford@roehampton.ac.uk



Romy and Adam share a joke using the micro-songs.

With this in mind, I created a set of songs in the 1990s that use only functional, everyday language that is likely to be relevant to children and young people. The materials have recently been updated and expanded, and are

are constructed. Whenever a word is repeated, it uses the same, characteristic musical motif. This has two important consequences. First, it means that they are easy to remember. Second, they are easy to reproduce. Even an approximate version

Yet through music she can communicate not only her feelings, but specific choices too. The expressions ‘Yes please’ and ‘No thank you’ alone open up for her a new world of communication, including the ability to

“For almost all children, the ability to process musical sounds develops very early in the brain.”

published under the title Tuning In. They are freely available online – together with recordings of the songs that can serve as ‘backing tracks’ for teachers and teaching assistants to use – at <http://www.ambertrust.org/amberplus/>. The sheet music can also be purchased from Jessica Kingsley at <https://www.jkp.com/uk/tuning-in-music-book-1.html>.

At the heart of Tuning In are what are termed ‘micro-songs’ – very short melodies that just focus on one or two key words. A map of the micro-songs that appear in Tuning In is shown in the figure opposite.

What makes the micro-songs special is the systematic way in which they

of a micro-song, in which only the rhythm is correct, can be understood. This gives children the confidence to ‘have a go’, knowing that they will be understood. For some children, the music will scaffold language, providing a simple framework for them to use words. For others, who are unable to speak at all, the music can substitute for language – a proxy means of symbolic communication.

Communicate

The empowering effect of micro-songs can be extraordinary, for children who have endured years of being misunderstood. Romy is aphasic, due to a postnatal brain trauma.

express preferences and the capacity to choose. She even enjoys teasing me, playing the ‘Goodbye’ song when she means ‘Hello’, and vice versa!

It is important to recognise that micro-songs should be treated as a strategy that may be suitable for some children, but not necessarily all. And, as with every child on the autism spectrum with little or no verbal communication, they can and should be used in combination with other approaches, including signs and symbols. The crucial thing is to open up all potential channels of communication in the hope that messages will be conveyed and understood in a reciprocal way.



Professor Adam Ockelford is Director of the Applied Music Research Centre at the University of Roehampton. Adam’s book, *Music, Language and Autism: Exceptional Strategies for Exceptional Minds*, published by Jessica Kingsley, is available from all the usual outlets.