Singing and making music are among the most enjoyable learning activities for children. Because they have both elements - enjoyment and learning - I consider them to be essential methods of reinforcing basic skills in numeracy and literacy. While this reinforcement is useful to all children, regardless of their academic abilities, my own experiences in the classroom and as the mother of a child with Down syndrome tell me that it is vital to children with learning difficulties.

One of the most important abilities music and singing stimulate is auditory discrimination. This is important for all children, and vital for children with learning difficulties such as Down syndrome. I also think singing and music are essential to the development of children's imaginations and their ability to express ideas in words, music, dance and gesture.

Taking singing first, there are several ways in which the reinforcement of academic learning takes place through singing. The most basic reinforcement is by repetition. The Victorian fashion for rote learning was effective to a degree, but singing enables children to repeat words and phrases in a far more enjoyable way than just speech alone can provide. Indeed, singing can be so much fun that they are probably unaware that they are repeating (and thus learning) the same words over and over again!

Repetition is also important for learning the songs by heart, something that pre-reading children have to do. This is why so many nursery rhymes and children's songs have very simple words which are frequently repeated. Because children with learning difficulties struggle with reading for longer than the average child, learning songs by heart assumes greater importance in their academic spectrum.

For slow-learning children like Down syndrome children, singing is a particularly beneficial way of learning to construct phrases and sentences for the words they are using will be much more memorable as part of a song.

Songs can also provide good language models which are easy to follow as the flow of the words is often enhanced by the flow of the music. Singing provides an added advantage for these children too: it requires greater mouth movement and better articulation on the part of both the teacher and the pupil. A good illustration of this advantage is the ease with which we can sing in a foreign language without being able to talk in the same language.

Even when children can read fluently, the process of placing words into rhythmic patterns enables them to develop a slightly different skill, essential for singing and still reinforcing their use of language. Without knowing it, they are learning the basics of poetry!

Songs also contain rhymes, and recognising and using them gives an essential skill which children with language difficulties need to absorb.

Another reading skill develops as children sing: singing enhances phonological awareness for you have to sing every syllable with the musical notes. As they do this, without realising it, children are identifying onset and rime eg. making certain words rhyme or thinking of words that start with a specific sound or letter.

This is especially evident in songs where successive verses use the next letter of the alphabet (an Austrian went a-yodelling... and met a A... B...) or in songs where you can make up your own verses by substitution of words (The poor King found a goldfish in his bath, ..)
Songs aid language development in other ways too, for example, introducing new words and concepts to children, either individually at home in a family setting or in small groups or classes in school, and providing the ‘prompt’ and the opportunity to talk about them. Think of the number of songs about, say, the seasons, or songs that tell stories, songs with a message, songs with a moral even!

Action songs not only reinforce learning but also encourage better co-ordination. This can be in the form of matching the rhythm of an action with the rhythm of the music (eg. clapping in time) or it can be in the form of controlling movements with fingers so that the right number of fingers are held up for each verse of a counting song (eg. five green speckled frogs). It can also be in making the correct movement of fingers and hands to express the words or mood of a song (eg. five little leaves ... were dancing about, two fat gentlemen ... bowed most politely).

Songs also provide an enjoyable way to develop memory. There are counting songs, action songs, finger movement songs, songs which get longer with each verse, alphabet songs and story songs. I am sure that most of us can recall complete songs, even quite long ones, almost word for word. But very few of us could remember a story word for word.

Along with this, songs encourage children to sequence events, actions, ideas etc (There’s a hole in my bucket), especially in songs that get longer with each verse (Uncle Joe Scarecrow).

Imagination songs can be very stimulating, for children can make up their own verses once they have learnt the tune and the structure of the songs. Imagination songs and songs that tell stories also provide plenty of freedom for children to express themselves in movement, dance and gesture. For example, ‘Daddy’s taking us to the zoo’ where children can develop their own actions to suit the animals in each verse.

Singing in groups or in class also involves co-operation, especially when children are sharing ideas and activities. Not only does this lay the foundations for future team work, it also encourages children to listen to each other, to learn from each other and to value each other’s ideas.

Learning from each other in its simplest form involves a question-and-answer situation, and this is a skill which children with learning difficulties need much more help in developing. They may interrupt when others are speaking or not listen carefully enough to what another person or child is saying. Songs such as ‘Have you seen the Muffin Man?’ with one person or group posing the question and the other responding with the answer, are ideal for developing this skill.

A good example of a song to encourage sharing ideas is ‘She’ll be coming round the mountain’ where some of the ideas can be humorous, some nonsensical and some practical - and everyone can contribute their own favourite verse.

Moving on to music more generally, I firmly believe that music (NOT lager!) reaches the parts that other things can’t reach. A major reason for this is that music almost always elicits a response in the listener eg. tapping toes to a good drum beat, humming a catchy tune as you walk down the street, feeling happy or sad according to the mood of a piece of music.

This is why music therapy can be so effective in reaching out to children with severe behavioural difficulties or with multiple handicaps.

Another reason, I believe, is that we all have a sense of rhythm in our bodies and patterns - albeit changing ones - in our lives; we have heart beats, daily routines of work, families and sleep. But our responses to the same piece of music or song can be different, eg. some people have a better developed sense of rhythm and pattern than others, and we bring our cultural heritage, experiences and emotions to our responses too.

Like singing, making music involves listening and responding, co-operating and self-expression. The ability to join in with making music is not necessarily based on academic qualities, and many children with Down syndrome contribute as much as the typical child to music groups. Being part of even the simplest musical performance is an enriching experience for anyone, but it is particularly important for slow learners who have few opportunities to ‘shine’ in front of others.

Judging the different responses to making music in a group can often help a group leader, parent or teacher to identify children with learning difficulties, children who don’t understand what is going on because they lack
the language or the co-ordination to join in an action song or clap along with a rhythm.

For example, a slow learner may not be able to remember what to do, a dyspraxic child may have extreme difficulty in putting his hands on his head, shoulders, knees and toes, and a dyslexic may get the actions in the wrong order. These children will need extra help to enable them to participate fully, and when they do, the sense of achievement is all the more fulfilling.

Parents and group leaders may also be alerted to children who have hearing problems which have somehow not been identified. It will also be apparent that some children may not be responding appropriately or not responding at all for emotional reasons. All these children need help, and music can very often play a part in providing it.

Music is not just for the talented. We all have some musical threads in our lives’ tapestries: singing, humming, whistling and clapping along. Singing and music provide vital tools in everyone’s learning processes, and especially for children with Down syndrome. So bring out the musician in all our children, and help them learn more easily and more effectively.

Here are some practical examples:

1. Alphabet song - An Austrian went a-yodelling
2. Counting song - Five green speckled frogs, (also for rhyming) Barnacle Bill
3. Memory song - Uncle Joe Scarecrow (this also contains Cockney rhyming slang!)
4. Sequencing song - Soldier, soldier, will you marry me? There’s a hole in my bucket
5. Imagination song (words) - The poor King found a goldfish in his bath
6. Action song (fine motor) - Two fat gentlemen met in a lane
7. Action song (gross motor) - We can clap to the rhythm of the music
8. Imagination song (actions) - Daddy’s taking us to the zoo tomorrow
9. Foreign language song - Frere Jacques (sung in English and German as well as French!)
10. Dialect/regional songs - Uncle Tom Cobbley, Charlie is my darling
11. Chants/rhythm songs - rap songs, football chants
12. Story song - Gipsy Rover
13. Season song - Five little leaves (also good for counting)
14. Humorous song - Baby sardine
15. Using musical/rhythmic effects to tell a story - Three Billy Goats Gruff (also good for sequencing and memory)
16. Ideas/emotional song - Puff the Magic Dragon

As a post-script to this article, I would very much like to record a tape or CD of songs and music geared specifically to children with Down syndrome. The cost of recording the CD/tape and printing an accompanying handbook for families and teachers is likely to be around £5,000. If anyone can help with facilities or sponsorship, please write to me at 4 Ridgway, Woburn Sands, Milton Keynes MK17 8UT.

The author
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