

What a child's voice can and can't do

The basic message here is – think about what you *can* do, not what you can't.

A lot of the time, teachers have a tendency to be over-cautious with their approach, whereas children's voices are capable of achieving a great deal. Children over the age of 7 or 8 can learn and apply basic breathing technique and they can learn to use balanced posture when singing. By the age of 9 or 10 they can learn to differentiate between how they make breathy or clear, constricted or open, chest or head, nasal or denasal sounds. By 11 or 12 they can learn efficient vocal projection using resonance without strain. Throughout this time their bodies and larynxes are growing and getting stronger, so the possibilities are continuously increasing.

The problems with children's voices come when they are taught habits which would not be appropriate for *any* age. These are often introduced with the best intentions for choral sound but can be disastrous for the individual. So – assuming that the voice trainer knows how to teach effective and balanced vocal technique, what are the limitations? What can't children's voices do that adult voices can? Well, it's actually fairly straightforward.

1 The child has a higher larynx, it sits nearer to the back of the jaw rather than midway down the neck, and so the tube between the larynx and the lips (vocal tract) is shorter. A shorter tube has different resonant properties and the sound has more high frequencies, making it sound brighter.

2 The child has smaller lungs so cannot sing phrases as long as an adult can – that's not a surprise is it?

3 The child has shorter and thinner vocal folds, this means that the range of dynamic contrasts (loud and soft) is less, and the difference between thick and thin-fold (chest and head) is less.

4 The smaller larynx is also unable to achieve the pitch range of an adult voice. The lowest comfortable singing pitch at pre-school age is about middle C, this drops gradually until pre-puberty when the lowest note is generally the A or even G below middle C; the range can't be extended downwards. Often the comfortable upper limit of the child's voice is lower than the adult soprano, this will extend over time with a bit of the right sort of encouragement.

5 Within the larynx the muscles are not as coordinated and the cartilages are softer. This limits things like rapid coloratura passages (good luck with For unto us a child is born, from the Messiah). It also limits sustained high singing (for example, Schubert in G is a challenge).

In general the child singer has a reduced capacity for vocalizations that are disproportionately long, agile, loud, high, or rich in timbre. These limitations are non-negotiable; they vary between individuals, but you can't really change them. However, if you manage to teach such comprehensive vocal technique that you have achieved absolutely everything that you can with the voice and are merely held back by the physical limitations of youth – we'd all be really impressed!