

## **0. INTRODUCTION**

Hi, my name is Amy McConkey Robbins, I'm a speech, language-pathologist and certified Auditory Verbal Therapist. My colleague, music therapist Chris Barton, and I, have developed AudiTunes to be a resource for families and professionals caring for children with hearing loss who utilize LSL - the listening and spoken language approach. Both Chris and I have affiliations with St Joseph Institute for the Deaf in Indianapolis, which provides a LSL program. We utilize this approach with the conviction that through maximum use of residual hearing, early, vigilant fitting of technology such as hearing aids or cochlear implants, and meaningful engagement in spoken language environments, we can train the brain and auditory system so that children learn to listen and speak successfully. It is an approach that must be embraced by the families and friends of these children, because their support is crucial to a child's success.

In addition to this introduction, there are 10 AudiTunes segments, each of which contains a brief tutorial, video clips of children modeling music experiences, and additional supplementary materials.

Some might ask, "Why would you even sing or play music with a child who is deaf?" There are many reasons that I can think of and primary among them is the fact that music and speech share many commonalities, but also have some differences which can be used to jumpstart the auditory system. Speech and music both follow a sequence of developmental skills which must be learned in order to progress up the ladder towards competency. Speech and music share rhythm, pitch, timbre (the unique quality that an individual sound has that helps us to identify that sound. i.e. a trumpet vs a violin. However, the pitch spectrum is much greater in music than in speech. We can sing much higher and lower than we can speak and many instruments can play notes that we can never sing. But, we need to be able to access these pitches if we want to hear birds, sirens, or other important environmental sounds the world has to offer.

We now have compelling findings from research to prove that music changes the brain! Nina Kraus's work has shown that musicians are better listeners than non-musicians in how they perceive and process sound, which gives musicians an advantage when listening in noisy conditions, and we know that is something children with hearing loss often struggle with – listening in noise. We also know that music heard through a cochlear implant is not exactly the

same as what children with typical hearing experience, but we can assume that even in a lessthan-optimal state, music serves as a developmental jumpstarter, a language-learning tool, a cognitive enricher, a motivator and an attention enhancer.

For these reasons and more, Chris and I live by this mantra:

## Do music, REAL music, Every day!