



by Christine D'Amico

Using music to stimulate children's cognitive development.

Many parents are aware of the wonderful power of music to stimulate and develop the brain. Parents buy their babies CDs by Mozart, Bach and Beethoven, playing the recordings while their infants sleep, eat or play. These savvy parents know that their children's brains are actually growing and benefiting from the tones and melodies of the composers' great works. And classical music has been found to benefit not only the brain but also our moods, contributing to an overall sense of well-being.

Different types of music distinctly influence the brain. Classical music relaxes, calms and soothes, while country, pop, folk and rock can incite neural activity. Neuroscientists call music a whole-brain activity because both the left and right hemispheres are activated by its use. Music, with its various tones and rhythms, is like a second language. And as with learning another language, the process expands the brain.

Music is an incredible learning medium. It's a well-known fact that music enhances one's ability to retain information. The advertising community has been profiting from this truth for years. Can you finish this song, "I am stuck on Band-Aid brand cause..."? Or try "...is gonna move you." Does your brain instantly click and remember these catchy tunes about Band-Aids and Juicy Fruit? It probably does, and this is why advertisers have been using music to bring attention to and create memories about their products for years.

"Music is the electrical soil in which the spirit lives, thinks and invents."

—Ludwig van Beethoven

Similar to how advertising pairs jingles with images, the use of music in the classroom or while studying is consistent with theories of multi-sensory learning. Multi-sensory means implementing more than one sense, such as sight, hearing and touch. Cognitive psychologists have confirmed what educators have long known—that a multi-sensory approach to learning enhances and often expedites the learning process. Music is thus often applied in a multi-sensory teaching modality.

The research also confirms that the more senses we use, the deeper and broader the degree of learning. A solid curriculum uses auditory, visual, kinesthetic and tactile modes to supplement the learning experience. While music is obviously an auditory activity, the kinesthetic, visual and tactile modalities are easily activated by adding movement to the music, which is adapted to the specific learning goals. In addition, it has been suggested that music touches

a "sixth sense" that is spiritual, affecting a person's mood or sense of well-being. Music touches the soul.

Learning to read is a difficult task for many children because of the abstract nature of how letters come together to produce sounds and meanings, as well as the difficulty of interpreting letters into sounds. Using music, however, greatly establishes and enhances proper reading skills. According to Dr. Marilyn Jager Adams, renowned for her work in teaching reading and the author of *Beginning to Read: Thinking and Learning About Print* (The MIT Press), if letters and sounds are simply put to fun, rhyming music, students pick up the sounds quicker and more efficiently than repeating those sounds verbatim.

Learning math facts is also expedited by music. Children must master math skills for proficiency in certain academic subjects. Yet in the classroom or during tutoring, we often have students say and repeat difficult-to-learn facts rather than sing, move and even dance to them. Music and movement tremendously augment the recall of difficult facts because getting the body physically involved strengthens neurological connections in the brain. There are teaching methods solely devoted to movement and learning, such as the Total Physical Response method by Dr. James Asher, who uses movement to teach foreign languages.

Sounds of all types are important to a growing brain. In addition to instrumental music, there is nature music or nature therapy. Sounds involved include the patter of rain on a roof, the rushing of wind, ocean waves lapping the seashore, a waterfall flowing over rocks, leaves rustling in the wind and the sweet tones of singing birds. These sounds and tones are music to the brain and can be used to calm a high-energy child. In fact, placing a rock waterfall in classrooms can soothe and calm students.

Many online resources highlight musical programs and offer musical enrichment kits for parents. Check out sites including www.audiomemory.com, www.singnlearn.com, www.sara-jordan.com, www.songsforteaching.com and www.songsthatteachusa.com for great products for teaching subjects through music. You may also want to read *Soundtracks for Learning* (Crown House Publishing) by Chris Boyd Brewer to incorporate music in the classroom and to stimulate children's brains at home. Of course, the music programs in this issue's Education Directory can also do wonders for cognitive development.

Whether you use music as background sound while children learn or as the main teaching modality, music should play a large role in your child's education. It makes learning easier, and certainly more fun!

Christine D'Amico is the director of ABC-Write Start Read! Inc. Learn more at www.abcwritestartread.com.