

Authors' Notes: The Neuroscience of Teaching Good Behavior Through Musikgarten

Authors' Notes: Please teach my child inner speech and impulse control.

Volume 1; No. 3
January, 2011

Welcome to the third issue of Authors' Notes!

As the parent of a toddler, you are witnessing a series of amazing events. On a daily basis toddlers engage in behaviors - some good and some exasperating - that will have you saying, "I didn't think s/he could do that!" One of the most exciting developments to witness is your child's acquisition of language skills. Your child might be an early talker or s/he might wait until s/he is almost three to begin talking; this is all within the range of "normal" development. Once s/he starts talking it may be hard to get a little quiet time! That's the funny thing about parenting...

One day we are praising our children for taking their first step or uttering their first word and the next day we are pleading with them to sit still and be quiet!

What is impulse control? Impulse control is when a verbal cue overrides a motor cue. Sounds simple, right? Not so, if you are a young child, still of the age when physical development is paramount and language development occurs at a slower rate. For these children, once their motor is going, it is hard to stop it. When driving a car, if you want to stop at the corner you have to apply the brakes 100 feet before the corner; likewise, it takes a young child *time* to stop a physical movement in which s/he is already engaged.

The ability to wait +

To be relaxed and calm +

Inner Speech =

IMPULSE CONTROL

We know that inner speech is an important component of impulse control and that it takes a long time to develop, but *what, exactly, is inner speech?* According to Neuroscience Educator, Dr. Dee Coulter:

Inner speech is a kind of 'self-talk' children use to guide their actions.

It is the conversation that we, as adults, often have with ourselves when faced with a difficult decision. It is the voice inside our head that will caution us if we are contemplating becoming involved in actions or situations that are potentially risky or hurtful.

Before one has achieved a true sense of inner speech - usually by age 8 or 9, according to Coulter - these thoughts or thought processes are usually expressed out loud. We will often hear children talking through their actions. We can support this with music that does the same thing; songs that link actions with words, such as *Looby Loo* are wonderful tools, as they strengthen the child's understanding of specific language by linking them to movement. Through repetition, the words are practiced and eventually your child's understanding of the language becomes internalized. Upon turning 4 or 5, your child will be able to rely on his/her bank of internalized language - or inner speech - to override temptations and help control movement impulses. According to Coulter:

Later, children will need this inner speech to guide their silent reading. Without it, reading and writing fail to develop well.

So what can you do to help the development along? Music is the perfect tool for nurturing a child's sense of inner speech, and Musikgarten is particularly committed to this effort. Long before your child began speaking, s/he was busy building her listening vocabulary. Musikgarten classes are full of songs and activities in which we are singing about what we are doing. In our Babies class, when you are touching your child's eyes, ears, nose and lips while, at the same time, labeling them in the song or chant, you are laying the very foundation for your child to develop a sense of inner speech. In your present Musikgarten class, you join your child as s/he chants and moves to *Oliver Twist*, changing the motion according to the verbal cues and the accompaniment. This type of song is a favorite of all children, since they have so recently discovered their locomotor skills, but it is by no means just fun; engaging in the movement while hearing it labeled over and over further contributes to the development of children's inner speech. When we add the challenge of *stopping* movement in a song such as *Forward March*, everyone - children included - sings the word "stop" as they stop the movement - allowing a verbal cue to override a motor cue. This activity is cultivating both the children's sense of inner speech and impulse control.

As your children get older and progress into *The Cycle of Seasons* class, we will engage them in recorded movement activities where we first tell them a story, and then have them listen to a musical representation of the story. We then invite the children to "act out" the story to the music, using the music to guide their actions. By first tying the music to the language of the story, and then incorporating movement, we are helping the children organize their listening skills, strengthen their sense of inner speech, and ultimately control their movements and impulses.

In addition to the academic ramifications Dr. Coulter also mentions the social ramifications linked to the development of inner speech and impulse control. For instance, impulse control allows children to grow to be good listeners, as they are able to quiet their body and mind to be receptive to the conversation taking place, and inner speech allows them to reflect on the conversation in order to formulate a thoughtful response. According to Dr Coulter:

Children need impulse control to be successful at learning, at making friends, and at doing complex tasks. Without it, their future is bleak.

As parents, we all want to do what is best for our children. Wouldn't it be great if every important development in our children's lives were as easy to nurture as this one? By participating in the continuum of Musikgarten classes, you are giving your child a gift that will continue to benefit him/her for years to come!

References for Cultivating Impulse Control

Key words - impulse control, calming, self-calming, frustration tolerance, self-regulation, initiative, endurance, www.trauma-pages.com A partial bibliography The work of Clancy Blair, Pennsylvania State University [<http://www.hhdev.psu.edu/hdfs/faculty/blair.html>]

· Riggs, N., Blair, C., & Greenberg, M. (2004). Concurrent and 2-year longitudinal relations between executive function and the behavior of 1st and 2nd grade children. *Child Neuropsychology*, 9, 267-276. Blair, C. (2003). Behavioral inhibition and behavioral activation in young children: Relations with self-regulation and adaptation to preschool in children attending Head Start. *Developmental Psychobiology*, 42, 301-311.

· Blair, C. & Razza, R.P. (2007). Relating effortful control, executive function, and false- belief understanding to emerging math and literacy ability in kindergarten. *Child Development*, 78, 647-663. Hepper, Peter G. 1991. An examination of fetal learning before and after birth, *The Irish Journal of Psychology*, 12:95-107 Perry, B.D. (2001b). The neurodevelopmental impact of violence in childhood. In Schetky D & Benedek, E. (Eds.) *Textbook of child and adolescent forensic psychiatry*. Washington, D.C.: American Psychiatric Press, Inc. (pp. 221-238).

Siegel, Daniel J. 1999. *The Developing Mind: How Relationships and the Brain Interact to Shape Who We Are*. Guilford Press NY

©Musikgarten, www.Musikgarten.org

All rights reserved. No part of this publication may be produced, stored in a retrieval system, or transmitted in any form or by any means without prior written permission of Music Matters, Inc.