

## **THE LISTENING FUNCTION**

### **The Key to Communication, Language, Learning and Social Behavior**

By Paul Madaule

#### **Who:**

Millions of children are identified as achieving below their potential. They are labeled with learning disability, auditory processing disorder, ADD, or behavioral disorder. They may struggle learning to read, write, spell, and master mathematics. They tend to act out, lack self-confidence, and become alienated at school. They frustrate parents and professionals who know they could do better “if only they applied themselves”. These children often “fall through the cracks”.

These issues may take a back seat with adults when they are no longer confronted with the day to day challenges of school and studies but they do not go away. Major life changes such as the need to go back to studying, a career change or a stressful personal event may throw off the compensatory mechanisms put in place and bring back the “ghosts of childhood” to the surface.

#### **What:**

School problems usually don't come out of the blue, they are often accompanied by delayed language or motor development, mixed lateral dominance, history of ear infections, oversensitivity to some sounds, touch and movement or an excessive craving for sensory input like spinning or “rough house” play. These children often react at home, in school or with friends in ways that are difficult to predict or understand. They frustrate easily, have temper tantrums, are “thin-skinned”, aggressive or, at the contrary, they are overly shy, inhibited, ill at ease in their body and socially, or lack self confidence. These may be symptoms of an underlying poorly regulated sensory system and, more particularly, a listening *mal*-function.

#### **Why:**

We are bombarded by billions of sensory input daily. How our brain receives, selects, processes and connects this information provides the neurophysiological foundations for communication and learning.

The listening function precedes hearing. The inner ear is made of the vestibular system which gives us a sense of gravitation, movement and balance together with the cochlea, which provides sound perception. The listening function is the first modality to develop in utero, forming primary connections with the developing brain. It provides this neurophysiological foundation necessary for learning and communication in its role of integrating and relaying sensory information from within and outside our bodies. In order to make sense, tactile visual and auditory input has to be interpreted through the vestibular-cochlear system.

The listening function links the inner and outer world. It helps us focus by cutting off irrelevant stimuli, so we attend and concentrate. It helps us sort and organize this

information into meaningful messages. When this process is disturbed, the resulting listening problem will impact high level functions such as academic learning and social-emotional adjustment. These abilities improve when the underlying sensory process is addressed.

**How:**

Listening Training makes ample use of music as an outstanding source of sound stimulation. Not only does music has an energizing effect, it also organizes the brain to receive the countless messages we encounter daily, sorting the relevant from the irrelevant and allowing integration.

Listening training develops and improves the ear's ability to listen in an efficient, organized, and balanced manner. With a restored and normalized listening function, the child has a new, more accurate perceptual “zoom” through which he can interpret and interact with the world. The ear is now attuned between the child and his environment. Information can flow in and out without obstacles or distortions. When the child returns to a previously difficult academic setting he will find it less challenging or boring and more fun. Posture, gross and fine motor skills improve. Communication becomes easier. With a better regulated sensory system, the child feels more comfortable in his own body and is therefore happier.

**Where:**

The Listening Centre in Toronto has helped children and adults alike from all over the world since 1978. The individually-tailored Listening Training programs are delivered through audio equipment specifically engineered to exercise the listening function. For families from out of town, portions of the program can sometimes be completed at home under the Centre’s supervision and guidance.