## Interactive Metronome: A look into an SLPs tool box



By: Dana M. Merritt, MS, CCC-SLP

Kate, a 9 year sad "withdrawn" little girl, with very impaired articulation skills came to Merritt Speech & Learning. Her father and mother both work in the medical field and were very concerned. They knew personally and professionally that Kate was delayed in her speech and language skills. Kate began to use her first words at 2 years old and began simple sentences at 3 years old. Her mother reported that Kate had experienced a hearing loss as a toddler but that surgery restored her hearing.

Kate exhibited perplexing symptoms that persisted through the early school years. Multiple diagnostic and medical exams were inconclusive. Her parents consulted numerous academic and healthcare professionals. There seemed to be no answer for Kate's trouble with reading, fatigue, eye pain and headaches.

Kate was diagnosed with Visual Processing and Auditory Processing Disorders, in addition to a Speech-Language Disorder. After completing seven sessions of Visual Processing Therapy Kate's reading and handwriting skills dramatically improved and her eye strain and pain dissipated.

However, Kate's severe Auditory Processing Disorder was hindering her articulation skills, her phonological processing skills and her reading comprehension skills. Therefore, Kate was enrolled in the Early Intervention Program. This program was designed by Dana Merritt, MS-SLP and utilizes the Interactive Metronome. Although the Early Intervention Program was designed for children from 3 to 5 years of age it has been found beneficial for children who were too severe to enroll in the Fast ForWord program.

IM provided excellent auditory stimulation to the auditory cortex while the clinician moved the child through five different modified exercises. The movements were done for Kate within a 30 millisecond window of time to maximize the ideal immediate auditory feedback for her. Kate was simultaneously presented excellent stimulation through the "ear gates", the "eye gates" and the "motor gates" to develop multiple association fibers between the auditory, visual and motor areas of the developing brain. Young children or severely impaired patients can be moved through this Early Intervention Program. Through these modified exercises these patients can make significant progress in their overall coordination, communication and cognitive skills. This procedure with Interactive Metronome's patented guidance system provided

structured, goal oriented treatment protocol.

Kate completed fifteen sessions of IM therapy, three times a week for five weeks. She loved doing the therapy because she heard the IM reward sounds nearly 80% of the time. She grew increasingly more confident, spoke with enhanced descriptive skills, used improved enunciation, became better coordinated, and much more social.

After the Early Intervention Program with Interactive Metronome, Kate enrolled in the Fast ForWord program. She made excellent progress. Kate showed even more progress in her ability to follow multiple step commands, her use of morphological markers, and in giving better details in a logical manner in her story telling skills. Her articulation skills improved so dramatically that direct articulation therapy was not even needed.

Kate has improved so much that her parents have taken a much deserved break from all interventions. I recently heard from her father, "Kate is now a 5th grader and an A-B honor roll student." But the most amazing thing is that Kate was 'Dorothy' in her school's production of "The Wizard of Oz." The parents describe the difference their daughter as a

"transformation that is amazing" and they wanted to share their "success story."

