

Emerge



Believing
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A Child's Place

May 2014

Occupational Therapy
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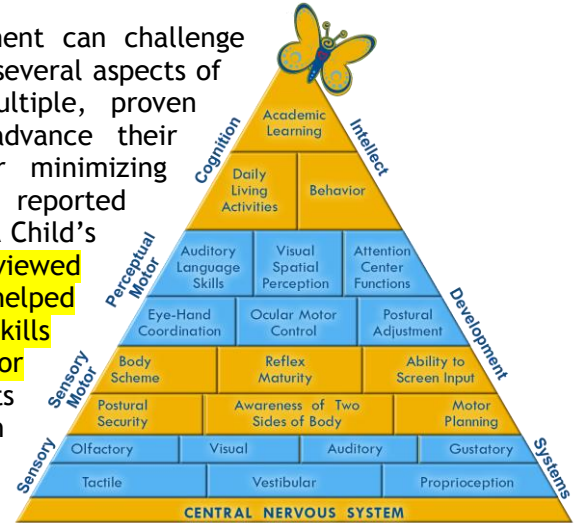
Interactive Metronome

Greatly Enhances a
Traditional Reading Improvement Program



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Founder / Director

Developmental reading and language impairment can challenge students and persist into adulthood, impacting several aspects of quality of life. Fortunately there are multiple, proven interventions to help school-age children advance their reading and language skills, overcoming or minimizing developmental delays. We have previously reported about an innovative therapy used at Emerge - A Child's Place: Interactive Metronome. In peer-reviewed studies, Interactive Metronome programs have helped children advance reading, language, and math skills one to two grade levels in a matter of weeks or months.¹⁻⁷ As clinicians, educators, and parents consider various strategies for children with reading or language delay, there are multiple, proven strategies to consider. One question, that until recently remained to be answered was "Can you combine Interactive Metronome with more traditional approaches for greater effect?" Michael Ritter and colleagues recently published a study exploring that question as well as the exact mechanisms by which Interactive Metronome helps children.⁷



In their study, 49 children, in second to fifth grade, who experienced language and reading impairments, were entered into summer programs. All children received a traditional, teaching-oriented reading and language program: *Read Naturally*.⁸ Half the children additionally received Interactive Metronome sessions. After four weeks, testing scores for both groups trended higher in reading rate, accuracy, fluency, and comprehension, but the score gain was much better in the group that received the traditional reading & language program plus Interactive Metronome. For instance, in the DIBEL-6⁹ test of fluently reading paragraph-level material, children in the teaching program improved their test scores an average of 2.05 points while the students who also used Interactive Metronome improved their test scores 8.29 points on average. Interactive Metronome improved the gains in five of six measures - on average by more than 200%.

Interactive Metronome at Emerge is a therapy designed to help children improve foundational skills that underlie reading and language skills. Research suggests that children with reading disabilities tend to also exhibit deficits in temporal order judgment tasks.¹⁰ They tend to have slower processing for motor, phonological, lexical, visual, and grammatical tasks.¹¹ These types of skills are widely considered to underlie certain reading and language skills.¹² Interactive Metronome specifically works to improve those skills by letting children play in auditory processing / timing / motor control tasks. During treatment, children listen to a reoccurring, adaptive beat via headphones and attempt to match tapping or clapping motions using sensors. Children receive immediate feedback regarding the accuracy of their timing and motor coordination via changing tones and/or images on a monitor. By practicing these skills specifically in a progressive, game-like program, children can tune the neural mechanisms controlling mental timing and processing speed.¹³ These improvements are then generalized across multiple same-level and higher level skills such as auditory language skills, visual spatial skills, and attention center functions. When you are working with a child delayed in reading and language skills, please consider a referral for an inexpensive Interactive Metronome assessment at Emerge - A Child's Place.

Please tell parents about Emerge – A Child's Place
Believing in a Child's Potential to Flourish

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