Ramani and Passingham published "Changes in the Human Brain during Rhythm Learning" in 2001. In the study, participants were given a visual cue and had to respond with a sequence of finger taps. There was a "rhythm condition" in which the visual cues arrived at a set interval. And there was a "random condition" in which the visual cues arrived at no set interval and as such there was no rhythm to learn. In the rhythm condition reaction times decreased over the course of the experiment, while there was no corresponding decrease in the random condition. At first, the subject has to "attend to the visual events" to learn the rhythm. As subjects learned the rhythm, reaction times decreased. Additionally, "attention to [finger] movement also declined as the responses became more automatic."

NeuroNet Listen, Talk and Write exercises are in line with this research as they require students to perform repetitive handwriting tasks in rhythm. At first, students have to learn the rhythm, and may begin writing reactively, or out of sync with the audio pattern. As students learn the rhythm, they also learn to write more accurately. In this way, there is a cumulative positive feedback effect on handwriting -- as rhythm improves accuracy improves and as accuracy improves rhythm improves, until the child can perform the task from memory.

NOTE: Articles extracted from NeuroNet Learning website: