

Instruction on the stroke sequence of Chinese characters facilitates childrens learning of handwriting

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Abstract

The purpose of the study was to examine whether knowledge of the prescribed stroke sequence matters for learning of handwriting of a new Chinese character. Twenty five junior primary school children participated in the study and were asked to write 6 new characters; with 3 characters with stroke sequence instructions and 3 characters without instructions on a Wacom Intuos 5 digitizing writing tablet. Each character was repeated 40 times. Trajectory, speed, onpaper time, inair time, and number of changes in velocity direction per stroke (NCV) were measured. The results showed a significant time effect (practice). The effect of stroke sequence instructions was also significant. With stroke instruction, children presented faster speed, shorter on-paper time, shorter in-air time and shorter trajectory. But there was no effect of stroke instruction on NCV. Further the results showed that some measures did not reach plateau even after 40 times of writing. We interpret the results as indicating that the knowledge of the stroke sequences is important for the learning of handwriting of Chinese characters. The results also imply that with continuing practice, stroke instruction may continue to improve handwriting.