

Research: Why Handwriting is Important

Legible handwriting remains an important life skill that deserves greater attention from educators and health practitioners. Handwriting is not 'mechanical' for many young writers. Each time they are faced with writing a letter they must construct a new 'program' for constructing the letter. **Because they are focused on letter construction, they have fewer attentional resources to devote to the meaning-making aspects of composing.** Frequent, brief, **explicit instruction** that helps young children learn to automatize letter production and **retrieve letter forms rapidly from memory.**

Handwriting, and in particular the automaticity of letter production, appears to facilitate high-order composing processes by freeing up working memory to deal with the complex tasks of planning, organizing, revising and regulating the production of text. **Research suggests that automatic letter writing is the single best predictor of length and quality of written composition in the primary years.**

Graham, S., Bereninger, V., Abbott, R., Abbott, S. and Whitaker, D. (1997).

The role of mechanics in composing of elementary school students: a new methodological approach. Journal of Educational Psychology, 89.1, pp. 170-182.

Feder, K. and Majnemer, A. (2007). *Handwriting development, competency and intervention. Developmental Medicine and Child Neurology, Apr: 49(4): pp. 312-317.*

Excerpts from Education Week Article, 2012

If the handwriting skills aren't automatic, it interferes with the whole writing process.

The brain scans indicated that "handwriting, not keyboarding, leads to adult-like neural processing in the visual system," which Ms. Harman-James says suggests that handwriting may have a particular role in setting children up for reading acquisition.

Excerpts from *How Handwriting Trains the Brain: Forming Letters is Key to Learning, Memory, Ideas* by Gwendolyn Bounds, The Wall Street Journal, October 5, 2010

Suggesting that the **specific movements memorized when learning how to write aided the visual identification of graphic shapes.**

She says pictures of the brain have illustrated that **sequential finger movements activated massive regions involved in thinking, language and working memory**—the system for temporarily storing and managing information.

One iPhone app which can be downloaded for \$1.99, called "abc PocketPhonics," instructs the student to draw letters with his finger or a stylus; correct movements earn him cheering pencils.

In a Maryland kindergarten, children were taught to write on paper but recently also began tracing letter shapes on the screen of an iPad using a handwriting app.

Excerpts from *Conversations*, by Regie Routman, Heinemann, 2000.

Too many of us no longer value handwriting and don't teach it. While handwriting (forming letters on paper) is not writing (forming ideas), handwriting facilitates writing. **When a student is not struggling with letter formation, he is freer to write fluently.** Unfortunately, more and more students in our classrooms form their letters laboriously and have awkward pencil grips - perhaps because they spend too much time in front of televisions and computer games. In any case, our society values legibility and often judges content adversely when the handwriting is poor, so it is **just good public relations and common sense to teach and expect good handwriting... Make sure that some published pieces are handwritten, not word processed; handwriting also reflects the individuality of the writer.**

Excerpts from *Celebrate Language and Accelerate Literacy*, by Nellie Edge, 2012.

Mindless (one-size-fits-all) workbook sheets are not considered appropriate or "good practice" in kindergarten. They are neither emotionally satisfying nor authentic enough to engage young learners.

Children deserve proven, successful multisensory practices (large and small group) with close individual coaching and using words that carry meaning.