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**Argument for handwriting**

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## 10 reasons to write by hand

**A current study by Princeton University proves: handwriting leads to learning advantages**

The better the development of media technology, the lesser we write by hand. If one takes up a pen from time to time, the result is more often than not a handwriting which is hardly legible, contains many errors and on top of that hurts when writing extensively.

But, there are good reasons to write by hand more frequently:

**Scientists discovered: Writing by hand ...**

### 1. ... improves retentivity

Someone who takes down notes in longhand rather than taking notes on a laptop is able to process this information better. A current study by Princeton University shows: Students who take notes by laptop tend to transcribe lectures verbatim. Students taking notes in longhand process information while writing and reframe it in their own words and by that learn more effectively (Pam A. Mueller and Daniel M. Oppenheimer, Psychological Science June 2014). Children between four and five years did a lot better in an experiment if they had learned the "right" letters also in cursive handwriting. They recognized graphic characters easier than contemporaries who previously only were able to practice with computer and keyboard (Jean-Luc Velay and Marieke Longcamp, GEHIRN&GEIST 3/2007).

## **2. ... forces to conceptually penetrate the subject matter**

Producing a handwritten text is a by far more complex and demanding process than creating a text with the computer. The composer has to think first about what he wants to write (cf. Van der Ley, 2010, P. 35).

## **3. ... promotes learning to read and composing texts**

It is undisputed that there is a reciprocal influence between verbal and written expression, because writing is always a tool for recognizing language, too. (cf. Günther, 1996, P. 910). Woodcock and Johnson (1990) found hints for a correlation between learning to write by hand and the ability to compose texts. Several studies showed that learning to write by hand supports learning to write in general (Graham et al., 2000).

## **4. ... improves orthography**

It was shown that children with lesser graphic skills did worse in dictations (vcf. Vinter, 2010).

## **5. ... leads to a unique result**

Within an experiment writers were able to recognize the four letters written in their own hand out of 100 different letters (cf. Brügelmann, 1994, P. 55).

## **6. ... results in better grades for pupils, given they write well**

Teachers or other adults rate texts written in a fine handwriting better than those written with a less legible handwriting (i. a. Briggs 1980).

## **7. ... makes note taking easier**

The main function of handwriting is fluent and quick note taking of information at any time. Who writes quickly, fluent and legible uses this possibility as an adult, too (cf. Van der Ley, 2010).

## **8. ... influences cognition of children**

According to a multitude of studies there tends to be a significant correlation between coordinative skills and cognitive performance in childhood (cf. CoMiK-Studie, Everke Julia, 2009).

## **9. ... is important for child development**

There is a strong positive correlation between motor skills and the optical differentiation skill, a cognitive basic function in early childhood (cf. Voelcker/Rehage, 2005).

## 10. ... encourages communication in general

With handwriting pupils learn an overall process which, apart from learning signs and symbols, also creates the ability to communicate and to affirm oneself (Study by Fraunhofer Institute 2011).

### Resources:

- Mueller, Pam A, Oppenheimer, Daniel M. (June 2014): The Pen Is Mightier Than the Keyboard. Advantages of Longhand Over Laptop Note Taking, in Psychological Science.  
<http://pss.sagepub.com/content/25/6/1159>.
- Briggs, D. (1980): A study of the influence of handwriting upon grades using examination scripts. In: Educational Review, 32, P. 185-193.
- Brügelmann, H. (1994): Kinder auf dem Weg zur Schrift. Eine Fibel für Lehrer und Laien. 5. Auflage Kempten: Libelle.
- Graham, S., Harris, K.R. & Fink, B. (2000): Is Handwriting Causally Related to Learning to Write? Treatment of Handwriting Problems in Beginning Writers. In: Journal of Educational Psychology, 92, No 4, P. 620-633.
- Günther, H. & Pompino-Marschall, B. (1996): Basale Aspekte der Produktion und Perzeption mündlicher und schriftlicher Äußerungen. In: Günther, H. & Ludwig, O. (Hrsg.): Schrift und Schriftlichkeit. Writing and its Use. Ein interdisziplinäres Handbuch internationaler Forschung, An Interdisciplinary Handbook of International Research. Zweiter Halbband. Berlin, New York: de Gruyter. P. 903 – 918.
- Van der Ley, J. (2010): Kleine Kulturgeschichte der Handschrift. URL:  
[http://www.grundschulverband.de/%2Ffileadmin/%2Faktuell/%2FGrundschrift%2FGSa110\\_Mai10\\_Handschrift-Kulturgeschichte\\_S31-35.pdf&ei=ltuTYOqCszBtAaKtdTXDA&usg=AFQjCNGEz5v6nKdY7Ezljoso5uINjvRO-A](http://www.grundschulverband.de/%2Ffileadmin/%2Faktuell/%2FGrundschrift%2FGSa110_Mai10_Handschrift-Kulturgeschichte_S31-35.pdf&ei=ltuTYOqCszBtAaKtdTXDA&usg=AFQjCNGEz5v6nKdY7Ezljoso5uINjvRO-A) .
- Vinter, A. & Chartrel, E. (2010): Effects of different types of learning on handwriting movements in young children. In: Learning and Instruction. (20) 2010, P. 476-486.
- Woodcock, R. & Johnson, M. (1990): Woodcock-Johnson Psycho-Educational Battery – Revised. Riverside, Chicago.