Handwriting vs. typing: What does research tell us?

Consecutive interpreting is an old art in a digitized world. Does pen on paper create cognitive connections or are nimble fingers on a keyboard a fast lane to total recall?

Anja RÜTTEN.
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Whenever you get to talk about note-taking with a bunch of conference interpreters, at least one in ten will most probably be telling you that they just remember things better if they write them down using pen and paper. They don’t care about paperless offices, searching their documents and sorting glossaries alphabetically, sharing information with colleagues or simply avoiding excessive use of paper and having access to their documents any place, any time. The explanation goes roughly like this: “The words just travel through the pen up my arm, entering directly into my brain.”

Slightly too simple a reasoning to convince me … On the other hand, I am nonetheless suspicious about a phenomenon I found out about rather by coincidence: interpreting consecutively I can take many more notes, and more detailed ones, using my laptop computer than with pen and paper. Fair enough … but reason enough to scrap my good old-fashioned note-taking technique, which I was so proud of back when I graduated? Once very nuanced and systematic, nowadays my notes rather resemble a piece of paper someone forgot in the hen house. But I couldn’t care less, as my powers of memory seem to increase in inverse proportion to the beauty and legibility of my notes. Quite logical, actually: Interpreters’ note-taking technique is made to visualise semantic structures, and visualising means understanding in the first place. So the more you practice note-taking, the less you will end up needing them, which is why I am still quite fond of pen and paper notes after all. What we want to deliver is a lively and credible interpretation of a speech and not a sight translation of our notes.

Now that’s for interpreting. But do I really have to write down every piece of information with pen and paper for my mind to take it in as knowledge?

To my utmost delight, a team of researchers in the USA (Pam A. Mueller from Princeton University and Daniel M. Oppenheimer from the University of California, Los Angeles) have asked themselves exactly the same question: Does the instrument of note-taking (pen vs. keyboard) influence learning? The results are quite interesting: Students who had taken notes of a lecture using pen and paper performed better in answering conceptual questions than those who had taken notes using a laptop computer. Even though typing
has the advantage that more information can be captured, which in itself is beneficial to learning, the
downside – potentially outweighing this advantage – is that when fast-typing, people tend to
transcribe verbatim instead of synthesising the content (and the test participants did so even when
being told to avoid verbatim transcription). This in turn leads to shallower processing and impairs
conceptual learning. But, interestingly, what goes for conceptual learning does not necessarily apply
to other types of knowledge: For factual knowledge, the advantage pen-users showed over
keyboard-users did only occur when a week had elapsed between the lecture and the test. In
immediate testing, there was no difference in performance of pen vs. keyboard users.

As a conference interpreter, I am quite thrilled by this study. It is not without remembering the
famous sentence we hear so often - “You are supposed to translate, not to understand” - that our
wonderful note-taking technique springs to mind. If hand-written, i.e. summarising, content-based
notes are superior to verbatim typing, then just how much more efficient must interpreters’ notes be,
which are designed to do exactly this, encoding conceptual relations? Wouldn’t it be interesting to
repeat the same study with interpreters? And, by the way, shouldn’t the whole world learn how to
take notes like interpreters do?

Then again, as a paperless interpreter I am in a way reassured to know that mere factual knowledge
is eligible for keyboard-based processing after all. So I can still use my laptop computer while
interpreting (simultaneously or consecutively) in order to note down some numbers, names or terms
– be it for myself or for my colleague – while I rely on my brain for the rest of the job. But for “real”
consecutive interpreting, pen and paper (or touchscreen) plus strong note-taking skills are the
method of choice. And also in the preparation phase, when it comes to understanding the structure of
a company or a particular workflow, there is no such thing as visualising them manually – ideally
doing it the Matyssek or Rozan way.

PS: And if you are wondering how to bring the results of your spontaneous visualisations to your
hard disc ... What about the new microwaveable notebook?

Anja Rütten is a freelance conference interpreter for German (A), Spanish (B), English (C) and
French (C) based in Düsseldorf, Germany. She has specialised in knowledge management since the
mid-1990s. This article was published on her blog about information and knowledge management,
www.dolmetscher-wissen-alles.de.

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