Want To Take Better Notes? Get the Lead Out

Take notes by hand instead of on a laptop for deeper learning.
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One of the modern challenges for classroom teachers, especially at the college level, is how to deal with student use of laptops and other personal technology in the classroom. I know some instructors, at one end of the spectrum, who ban the use of all tablets and laptops except for specified group activities and others, at the opposite end, who take an "anything goes" approach.

The benefits and drawbacks of constant multitasking are complex, to be sure, especially given the results of a study last year published in *Computers and Education* that found that "secondhand multitasking"— in this case, being in view of someone who is bouncing between main and secondary tasks on a computer screen—may have even greater consequences on our attention and retention than our own multitasking habit:

> "[H]aving multitaskers in view did have a considerable impact on learning. In fact, the negative consequences of observing multitasking were *even greater* than those of performing multitasking oneself (perhaps because the multitaskers could time their multitasking to suit their own needs), counter to students' expectations. Neither multitaskers nor their neighboring victims realized the cost of merely *observing* multitasking." *Read More*

The full text of the study is available at "Laptop multitasking hinders classroom learning for both users and nearby peers." For an example of how large can be the rift between instructors' and students' views on this topic, watch the short FRONTLINE clip about "Multitasking at M.I.T."

Now, new research by Pam A. Mueller (Princeton) and Daniel M. Oppenheimer (UCLA) goes beyond the issue of distraction and multi-tasking to investigate the efficacy of tools used for the note taking process itself, The study of college students showed that one of the advantages of laptops—the speed with which they allow us to type word for word what is happening in a classroom or meeting—is also a drawback:

> "The studies we report here show that laptop use can negatively affect performance on educational assessments, even—or perhaps especially—when the computer is used for its intended function of easier note taking. Although more notes are beneficial, at least to a point, if the notes are taken indiscriminately or by mindlessly transcribing content, as is more likely the case on a laptop than when notes are taken longhand, the benefit disappears."

Two of the results were better recall of conceptual information when taking notes by hand and improved test taking when students were allowed to review handwritten notes rather than laptop notes. The study's authors conclude by advising "a healthy dose of caution" for classroom laptop use, but Mueller is also quoted in ScienceDaily as saying, "I don't anticipate that we'll get a mass of people switching back to notebooks,"

Even if we aren't prepared to sell our laptops for reams of college-ruled paper, students, parents, and teachers can consider studies such as these as they create their own habitats and habits that are more conducive to learning.

Students can pay attention to what works best to help them understand, remember, and recall information. One first year law student I know takes notes by hand in lectures but later transfers them to a Word file on his laptop, which makes them easier to study and read and also adds another layer of distillation.

Parents and students can borrow a technique from the longhand study and practice taking notes while watching TED Talks. Surprisingly, many high school students enter college with little practical skills or training in taking notes for a lecture course.

Teachers can consider sharing this kind of research with high school and college students in an informative "isn't this interesting?" kind of way rather than in a prescriptive way, thus better equipping those students with the knowledge they need to make good choices.

References

Mueller P.A. & Oppenheimer D.M. (2014) The Pen Is Mightier Than the Keyboard: Advantages of Longhand Over Laptop Note Taking, *Psychological Science*, DOI: 10.1177/0956797614524581

Sana, F., Weston, T., & Cepeda, N. J. (2013). Laptop multitasking hinders classroom learning for both users and nearby peers. *Computers & Education*, *62*, 24-31