



Welcome back to *The Bridge*, the monthly newsletter of the Center for Transformative Teaching and Learning.

Each month *The Bridge* analyzes a specific aspect of teaching and learning through a Mind, Brain and Education Science research-informed lens.

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## Volume 1: To Write or to Type?



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Merely using the word "type" certainly dates this year's first issue of *The Bridge*. Typewriters for today's students are foreign artifacts seen in museums rather than used daily for practical purposes. However, as electronic, personal learning devices permeate the lives of students, the prevalence of modern typing has raised an interesting research question: which is better for memory retention: taking handwritten or electronic notes?

This is an important question for teachers of all ages to ponder as they consider how students record instructions and take notes in the early months of the school year. All teachers want the lessons and classes they design to stick in each student's brain. Therefore, what if one way of note-taking is more effective than another? Accounting for potential note-taking accommodations a student might have, the debate over handwritten or electronic notes provides an opportunity to conduct class-based research with your students, especially with high schoolers, who take multiple advanced courses that require sophisticated note-taking skills.

Research suggests that handwritten and electronic note-taking are equally effective ways to help students answer questions that require factual recall. However, note-taking by hand appears to be a more effective way for students to begin consolidating information into their long-term memory for questions that demand conceptual understanding.

However, all students have a unique set of current strengths and weaknesses as learners; there is no such thing as the "average" student, as Harvard Graduate School of Education professor Todd Rose explains in his compelling new book, *The End of Average*, and [TED talk](#). We also know that all the pieces that compose the context of learning, like subject and school, make a difference too. So what method is best for any individual student sitting in a specific class?

To answer this question, why not do some research with your own students around note-taking and see what happens? Here's an idea: create a group of students who can only take notes by hand and a

group of students who can only take notes electronically for a particular unit. Conduct a pre-assessment of their current knowledge of the unit's topic or skills and proceed for at least a two-week period through the unit. At the end of the unit, assess which group performed better on the summative assessment. But beware when trying to read anything into a simple comparison of average scores of the two groups - you have just entered a statistics minefield. It may sound counterintuitive, but just because one method has a higher average, it doesn't automatically follow that it was more successful.

Instead, use this as one piece of information in a discussion you have with your students. What works best for them, with this kind of information, in this subject? Ultimately, a student can choose how they want to take notes, but reflecting on why this choice is best suited for his or her current learning strengths or weaknesses is an opportunity for metacognitive growth. The goal of this experiment is to build each student's metacognitive skills - which is a powerful research-informed strategy, as we will see in a later edition of *The Bridge*.

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**If you are interested in this topic and would like to know more we recommend exploring these resources:**

[A Review of a Key Research Paper](#)

[A Short Podcast Interview with the Researcher](#)

[Review of Research on Notes and Note-Taking:](#)

[Todd Rose TED talk](#)

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