## Best Methods for Studying / Revision

Since exam season is coming up, here are the best study / revision methods, purely based on scientific studies.

- 1. **Frequent testing**: While re-reading content may *seem* to be helpful, studies have shown that they only improve results for immediate, short-term examination. For exams that are further away, like a few days away, frequently testing yourself with mini-tests or multiple-choice tests has shown to substantially improve retention of information.
- 2. Cornell Note-Taking: Cornell note-taking is a way or writing and arranging your notes, that helps you process the information and understand it, rather than just writing it down. How it works: Divide your page into three parts, as shown in Figure 1. As you go through the lecture/lesson, write the keywords in the left column and the ideas of the topic on the right. After the end of the lecture, summarise what was taught in a short paragraph. But why does this work? Picking out keywords and key ideas, forces you to comprehend the information being spoken at you, as you have to decide where to put each piece of information.

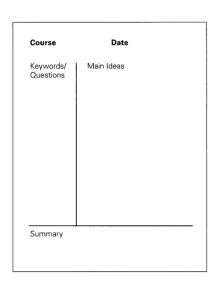


Figure 1 – [designer feel free to redraw this if it's too ugly for you]

3. **Interleaving Questions**: This one is most helpful for STEM – when students encounter a set of concepts that are similar to each other, they often confuse one with another. For example, they might choose the wrong method to solve a problem in maths, because it resembles a different kind of problem. These errors occur more frequently when you learn a concept all in one block, for example, doing textbook questions that all relate to the same topic, in one

go. A number of experiments have shown that interleaving the concepts (i.e mixing them together rather than only doing one type) produces higher test scores

## Sources:

Roediger, Henry L., and Jeffrey D. Karpicke. "Test-Enhanced Learning: Taking Memory Tests Improves Long-Term Retention." *Psychological Science* 17, no. 3 (2006): 249–55. http://www.jstor.org/stable/40064526.

Donohoo, Jenni. "Learning How to Learn: Cornell Notes as an Example." *Journal of Adolescent & Adult Literacy* 54, no. 3 (2010): 224–27. http://www.jstor.org/stable/40961530.

Rohrer, Doug. "Interleaving Helps Students Distinguish among Similar Concepts." *Educational Psychology Review* 24, no. 3 (2012): 355–67. http://www.jstor.org/stable/43546796.