Learning to Learn – Myth Busters

Myth 1: "I've got a naturally good memory – I don't need to revise"

The Truth

Without recapping information, within 1 hour 50% of new information can be forgotten, increasing to 90% if the information isn't reviewed within a week! Therefore, it is essential that we support students to move the knowledge learnt in lessons into their long-term memory. We do this in several ways:

1. Regular retrieval practice. Retrieval is an essential part of every lesson. With every retrieval, the amount of knowledge forgotten is reduced. Studies show that students that self-quiz could remember knowledge for a lot longer than those who didn't. Spacing out retrieval practice will strengthen a student's ability to access the knowledge at a later date and secure its place in their long-term memory. Retrieval can take many different forms such as:

- A recap quiz at the start of every lesson
- Summarising prior knowledge
- Applying knowledge to a new problem
- Self-testing using flashcards or Cornell Notes Sheets

2. Space retrieval out over time. The best time to review information is just before it is forgotten because students have to think hard to remember it, which is what strengthens memory. Our lessons build in spaced retrievals days and weeks after students are first exposed to the key knowledge.

3. Encourage interleaved practice. Research tells us that students prefer blocked practice (revising one topic at a time) but this gives a false sense of learning, as it doesn't allow the brain to work as hard at retrieval and strengthening the memory pathway. Interleaved practice (switching between topics in one study session) has a much more positive impact on students' final performance. Many students dislike it and feel that it is confusing, but the results are difficult to ignore! We model this by blending references to both current and prior learning into lessons and homework.

Did you know?

Studies have shown that retrieval practice not only improves memory recall in normal situations, but it also helps to negate the effect of stress hormones such as cortisol on memory. The release of stress hormones interferes with normal memory recall and makes it difficult for students to remember what they have learnt. Tests show that retrieval practice creates more distinct routes by which a memory can be accessed; so if students experience a release of cortisol during exams, the multiple pathways they've created through retrieval practice mean that forgetting due to cortisol release is less likely.

Further info

Click the images below for more information.