



Effective Revision Strategies

The Science of Learning

Research into cognitive science had provided us with advice on the science of learning, and what works best.

It has taught us these 3 things about memory

1. Your working memory is easily overloaded and therefore 'cramming' doesn't work
2. Information is forgotten if not revisited, it's natural
3. Practice and retrieval helps strengthen long-term memory and boosts learning

To improve your learning, you want to break the forgetting curve, by reviewing your learning often



What should you avoid?

You should not revise using the following methods, they make you feel you are doing something as it appears you're working hard, but your brain *isn't* working hard so therefore has little impact.

- Re-reading
- Summarising (instead try and do it from memory)
- Highlighting

The most powerful methods, as shown on the right, all aim to boost your memory by practice and retrieval

Spacing and interleaving

- 1. Rather than revising in 'topic blocks' it's better to chunk these topics and interleave them and spread them out
- 2. Don't cram all your revision to the end, it will overload your memory, so you won't learn effectively
- 3. Spread out your revision, in chunks, over time – forgetting helps your memory in the long-term

Deliberate Practice

- 1. **Review:** Spend time revising a topic/unit
- 2. **Practice:** Do an exam question/paper in timed conditions. No notes – this is from memory
- 3. **Check:** Compare your answer to your notes or a model answer. Then redraft and aim to improve

Retrieval Practice

- 1. Recalling information is simple but powerful – it tests your memory, helping to remember and boosting learning!
- 2. You can complete the following; quizzes, past papers, essays, flashcards or verbal questions
- 3. The most important part is **do it from memory** – then compare your notes to identify weak areas to revise

Dual Coding

- 1. Dual coding involves combining words and images to help your learning by representing information visually
- 2. You can create timelines, cartoon strips, mind maps, diagrams and flowcharts to explain events in time order, cause and consequence or links between ideas

Flashcards

- 1. Flashcards are an incredibly easy method to revise
- 2. Reduce your learning into small, easily revised chunks
- 3. Create for key words, equations and diagrams, with information on 1 side and questions/definitions on the other side
- 4. Use words such as '*What, When, Where, Why and How*' as question stems to form your answers on the other side of the flashcard