

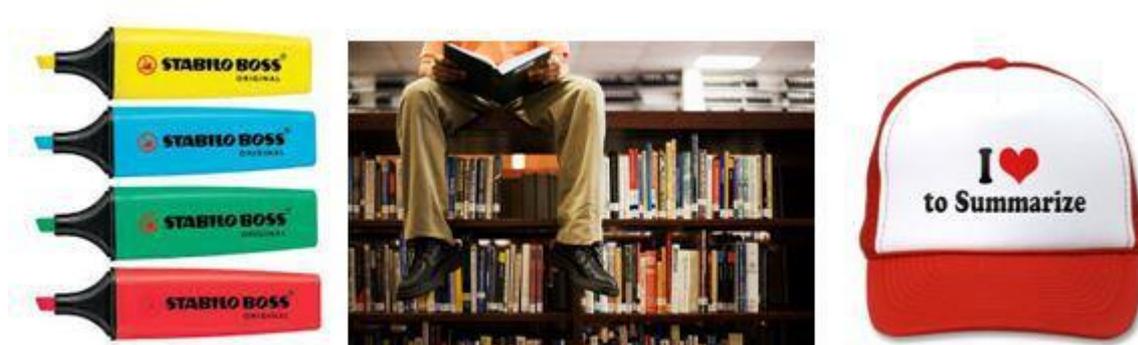
Parents – how can you help your child revise?

Finding & sharing teaching 'bright spots'

Supporting Learning Through Effective Revision Techniques

Posted on [January 29, 2015](#) by [classteaching](#)

Dunlosky et al identify the most effective techniques to support learning, that could be used for revision. Before this though, they also identify some common revision techniques that have been shown to have very little effect on learning.



Three commonly used revision techniques that appear to have very little impact on learning were:

- Highlighting texts
- Re-reading
- Summarising text

The reason these are so ineffective, is that they require very little cognitive work and it's cognitive work i.e. thinking about things, that makes us remember things. It's easy to see why are they are popular with students though. They are very low demand, make the students feel as if they are 'doing revision' and for highlighting and summarising, there is a product for their efforts. They can come bounding downstairs from their bedroom and show mum/dad highlighted sheets of text of revision that they have 'done'. Gratifying? Yes. Effective? No.

So having established what doesn't work, we need to explore what appears to work well and make a difference to learning.

1. Practice Testing

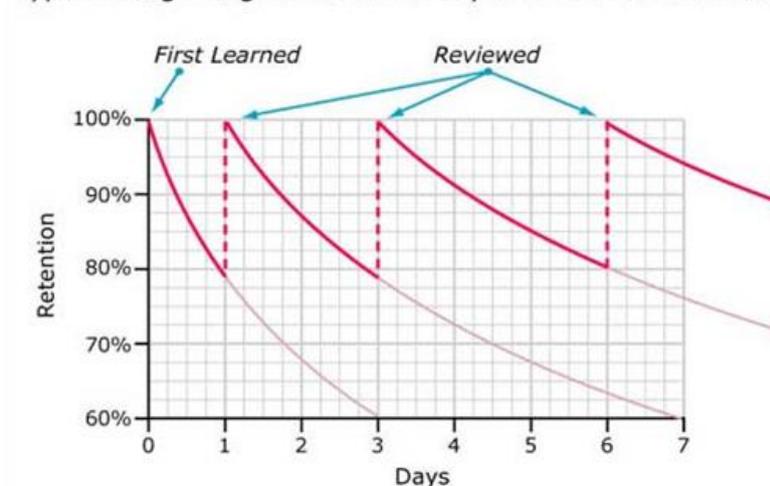
This technique is pretty straightforward – students keep testing themselves (or each other) on what they have got to learn. This technique has been shown to have the highest impact in terms of supporting student learning. Some ways in which students can do this easily:

- Create some flashcards, with questions on one side and answers on the other – and keep testing yourself.
- Work through past exam papers – many can be acquired through exam board websites.
- Simply quiz each other (or yourself) on key bits of information.
- Create ‘fill the gap’ exercises for your child and a friend to complete.
- Create multiple choice quizzes for friends to complete.

2. Distributed Practice

Rather than cramming all of their revision for each subject into one block, it's better to space it out – from now, through to the exams. Why is this better? Bizarrely, because it gives them some forgetting time. This means that when they come back to it a few weeks later, they will have to think harder, which actually helps them to remember it. Furthermore, the more frequently you come back to a topic, the better you remember it.

Typical Forgetting Curve for Newly Learned Information



The graph above demonstrates this, by returning to a topic and reviewing it, you remember it for longer.

3. Elaborate Interrogation

One of the best things that students can do (either to themselves or with a friend) to support their revision is to ask why an idea or concept is true – and then answer that why question. For example;

- In science, increasing the temperature can increase the rate of a chemical reaction....why?
- In geography, the leisure industry in British seaside towns like Barry Island in South Wales has deteriorated in the last 4 decades....why?
- In history, in 1929 the American stock exchange collapsed. This supported Hitler's rise to power....why?

So, rather than just trying to learn facts or ideas by reading them over and over, students should get into the habit of asking themselves why these things are true.

4. Self Explanation

Rather than looking at different topics from a subject in isolation, students should try to think about how this new information is related to what they know already. This is where mind- maps *might* come in useful – but the process of producing the mind map, is probably more useful than the finished product (not convinced about the focus put on colours, shape of branches etc.). So, they should think about a key central idea (the middle of the mind map) and then how new material, builds on the existing knowledge in the middle.

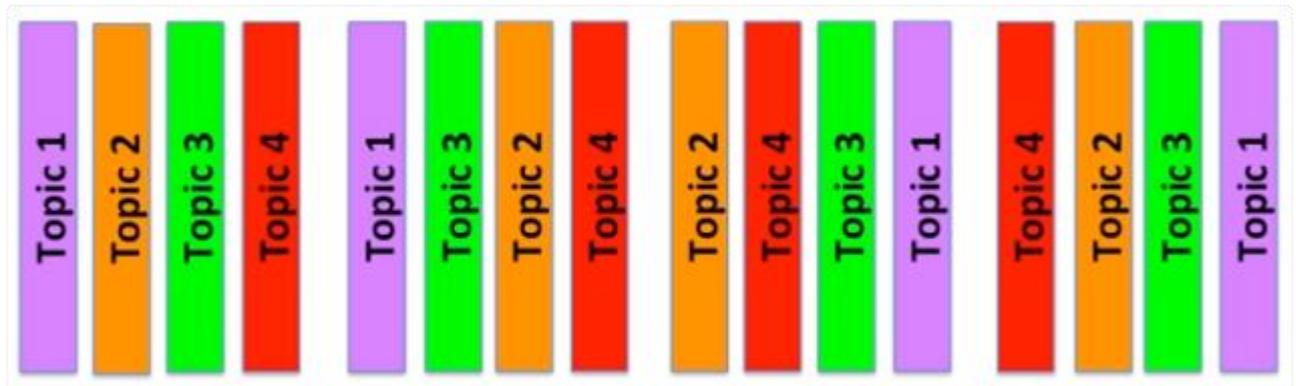
Alongside this, when they are solving a problem e.g. in maths, they should explain to someone the steps they took to solve the problem.

5. Interleaved Practice

When students are revising a subject, the temptation is to do it in 'blocks' of topics. Like below:



The problem with this is, is that it doesn't support the importance of repetition – which is so important to learning. So rather than revising in 'topic blocks' it's better to chunk these topics up in their revision programme and interleave them:



In summary

"Whatever you think about, that's what you remember. Memory is the residue of thought."
- Daniel Willingham

This quote from Daniel Willingham pretty much sums up the process of learning – we remember things when we have to think about them. So when supporting students with revision we should be doing more of the following:

- Testing.
- Spacing it out.
- Keep asking 'why'?
- Building on what they know.
- Getting them to explain their steps in problem solving.