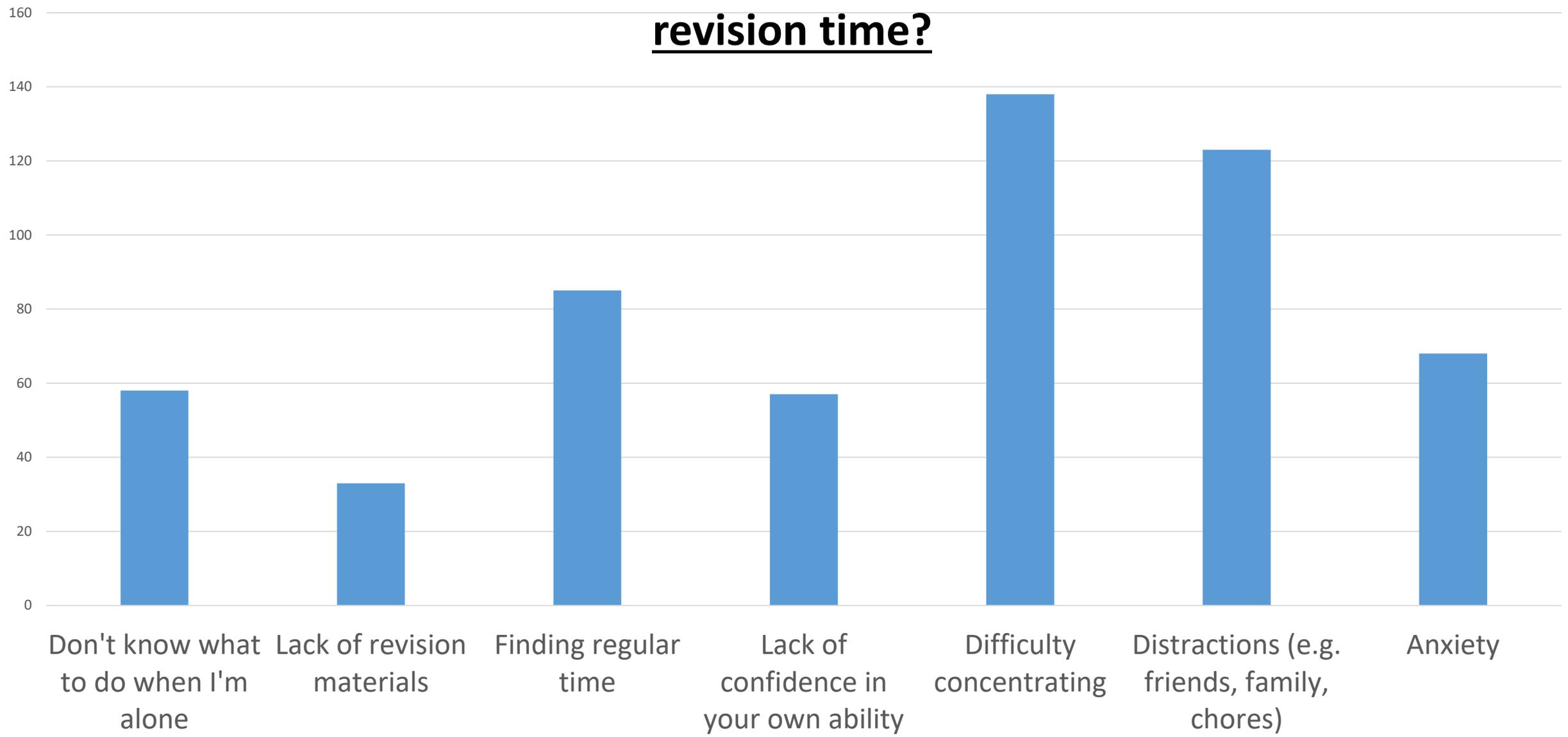


What obstacles do you currently face to engage in quality revision time?

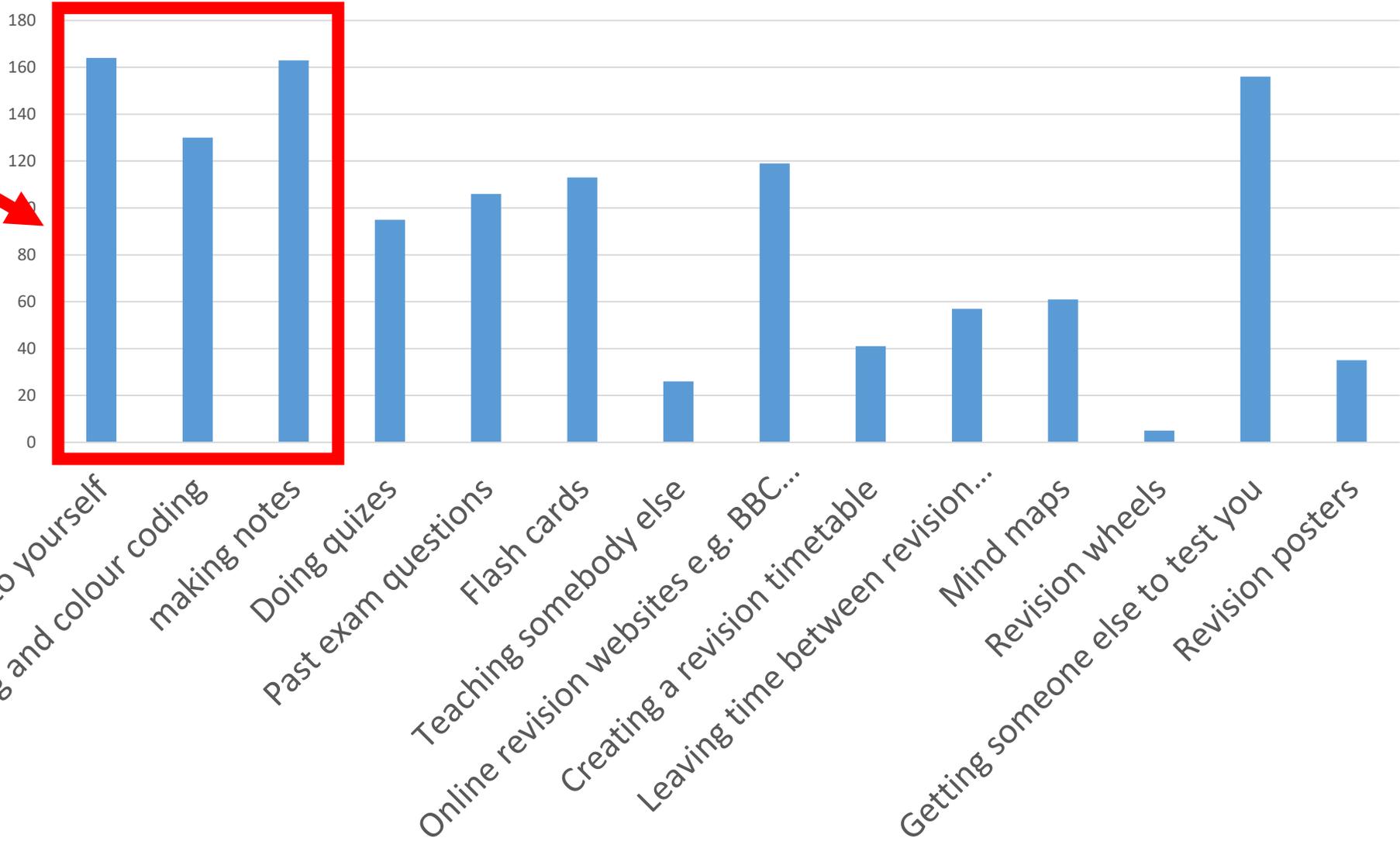


How long before a test do you revise?



What strategies do you use to revise?

Is this effective revision?



Effective Learning and Revision Techniques

and mark-ii

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Improving Students' Learning With Effective Learning Techniques: Promising Directions From Cognitive and Educational Psychology

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SAGE

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What makes great teaching?
Review of the underpinning research

Robert Coe, Cesare Aloisi, Steve Higgins and Lee Elliot Major
October 2014



What doesn't work . . .

- **Producing summaries of texts;**
- **Highlighting and underlining portions of text;**
- **And simply rereading the relevant materials.**

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.

1. Practice testing

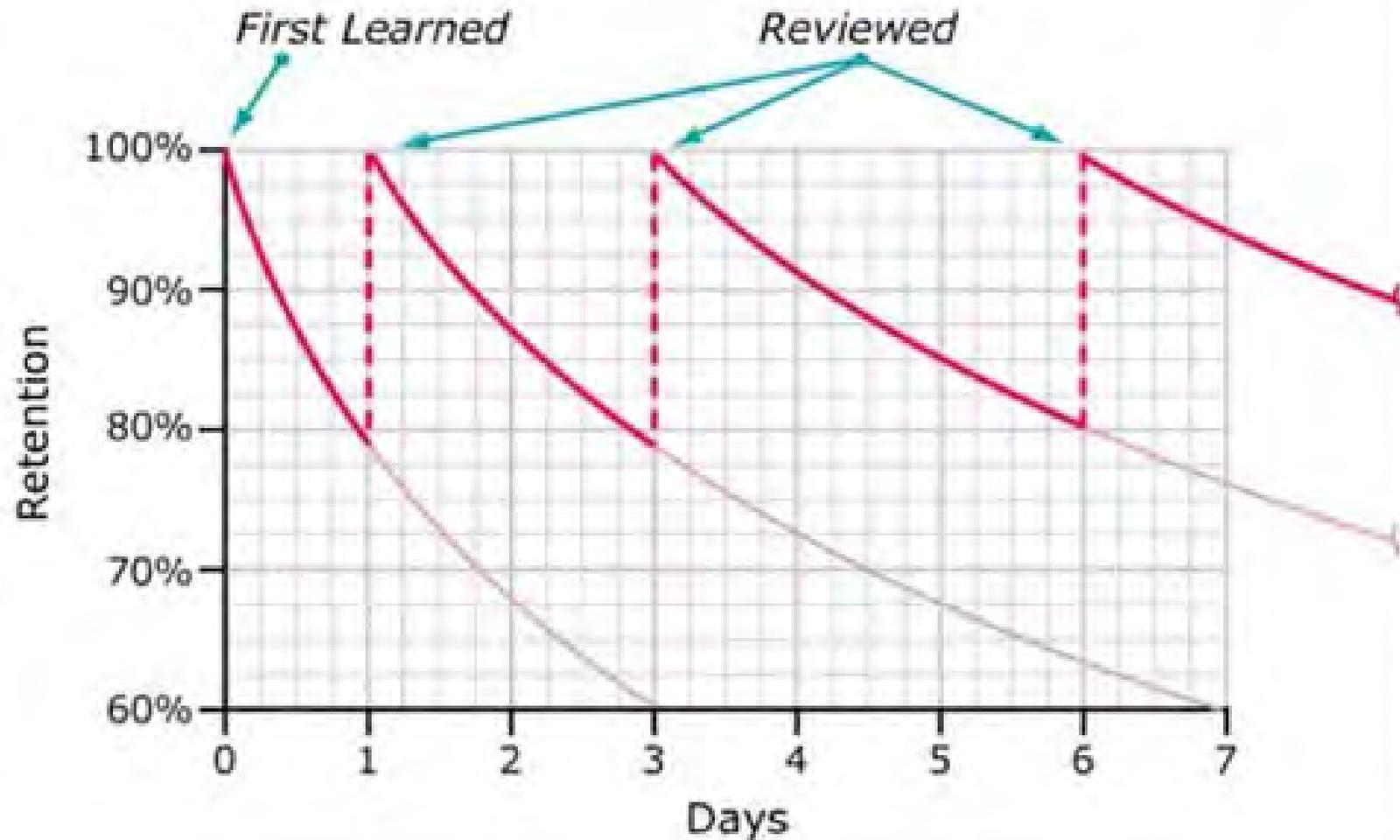
This technique is pretty straightforward – students keep testing themselves (or each other, or you could test them) on what they have got to learn. This technique has been shown to have the highest impact in terms of supporting student learning. Some ways in which students can do this easily:

- 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 you and a friend to complete.
- Create multiple choice quizzes for friends to complete.
- [Robert Bjork explains](#) the power of testing

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



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.

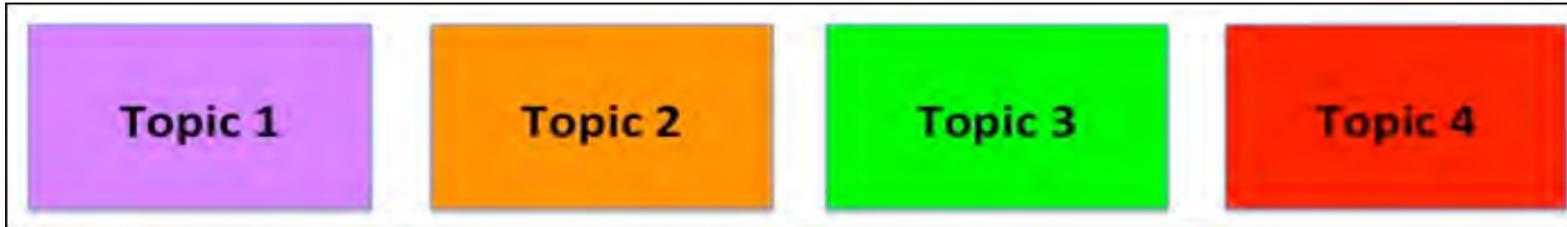
4. Self Explanation

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 (so don't be side-tracked by colour schemes, etc.) 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 there is a temptation to organise topics as below:



This kind of 'massed practice' can give a false impression of mastery. So rather than revising in 'topic blocks' it's better to chunk these topics up in their revision programme and interleave them:



In summary . . .

‘Learning happens when you think hard’

Prof Robert Coe

“Whatever you think about, that’s what you remember. Memory is the residue of thought.”
- Daniel Willingham

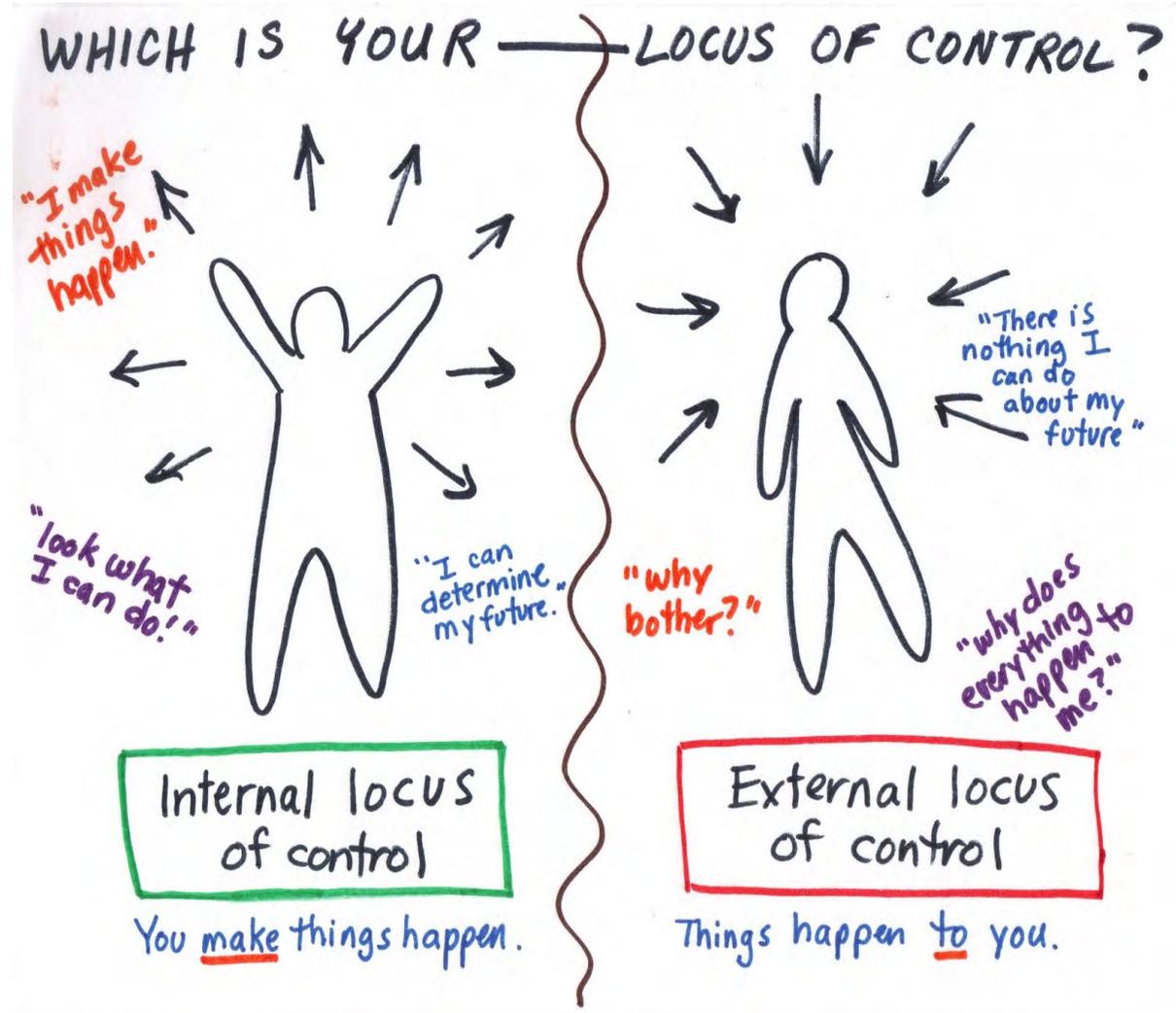


Acknowledgement

My thanks to Shaun Allison at Durrington High School for sharing many of these ideas on his blog



Barriers to success



1. It's my teachers

Reality

Students at HWS achieve very good exam results. We know our teachers are very good

What to say

- Are you doing everything you can do?
- Do you work as hard as in the lessons / with the teachers you like?
- Are you using other resources eg MyMaths, SAM Learning etc.

2. There is not enough time to change things

Reality

There are approximately 7 months until the exams, this is a significant amount of time to turn things around

What to say

- Focus on small steps eg doing an extra half an hour of work each day
- Help to work out a revision timetable
- Help to create some time by negotiating more about household chores, looking after siblings, etc.

3. I'm distracted by others

Reality

Behaviour is generally focused in year 11 lessons as the vast majority of students are very keen to do well. Most students are able to stay focused, even if sometimes other students stray off task.

What to say

- Who do you sit with in lessons? Can you ask your teacher to move you?
- What are you doing to avoid the distraction? What action can you take to improve things?
- OK, I will contact your teacher to find out how you are doing in the lesson and to explore the reasons why you are getting distracted!

4. Poor or challenging behaviour is natural, students will obviously rebel

Reality

The vast majority of students can manage to put up with what they might consider the oppressive aspects of school and focus on doing well

What to say

- All schools have rules, many are stricter than HWS, getting exercised about such things is distracting
- There is a relatively short amount of time left to follow our rules
- The sixth form has no uniform, is a more informal environment, etc.

5. Poor behaviour is not a barrier to achieving

Reality

Anything less than maximum focus and commitment will lead to some level of underachievement

What to say

- Poor behaviour means you are not fully focused on what you should be learning
- Poor behaviour takes up time and energy the teacher could be utilising to enhance your learning
- Is it fair to have an adverse impact on the learning of others?

6. You need to enjoy something to learn

Reality

Learning involves thinking hard about things. You may enjoy it or you may not, but enjoyment does not equate to learning

What to say

- If it's hard it probably means you are learning
- If something seems easy you probably aren't learning
- It's crucial to do well in as many subjects as possible
- This will give you choices at post-16

7. I have a particular learning style

Reality

The idea of preferred learning styles has been thoroughly debunked

What to say

- This is simply not true, the best way to know if you've learnt something is to test yourself on it

8. I can't do _____ (insert subject of your choice)

Reality

All students can achieve in all of their GCSEs if they apply themselves in the right way

What to say

- Please, please, please *don't* say "It's ok, I wasn't any good at _____ either"
- Ask if they try as hard as they do in other subjects
- Ask if they understand what they need to do to improve
- For Maths and English remind them they will need to retake these GCSEs in post-16 if they don't achieve a good pass