

Memory is Residue of Thought

Welcome to our first Principal's sixth form assembly. I spoke to Ms Cragg a couple of weeks ago about delivering a series of assemblies for you. The point of these assemblies is twofold.

Firstly, as your head teacher, I would like to spend a little more time with our sixth form, with you, than I currently do.

Secondly, I'd like these assemblies to play a part in our responsibility to make you cleverer. Just like all your other lessons, and your homework and research, and reading. Isn't that what college is for? To make you cleverer? By cleverer I mean know more stuff and be able to make links between the things you know and be able apply and use the things you know. Unlike your lessons these assemblies will not be constrained by a specification, which will give us the opportunity to get you thinking about a broader range of things than your lessons can. My dearest hope is we may mention things in these assemblies that you do not know, and those things may pique your curiosity such that you go and read about them for yourselves.

Our assemblies will take place here, in the library, as a reminder the best way to make yourself cleverer is to read. And we will try to weave books, and other recommendations and references into these sessions to provide you with a little nudge in the direction of great works. If you recognise references in the assembly, do email me to let me know and I will give you credit. Gain enough credit and I'll allow you to jump the lunch queue earlier than 1pm.

In this assembly I am going to share some things I know, a delightful bit of imagery from the Harry Potter books, and an explanation for how we get from not knowing something, to knowing it.

As an aside, I am aware of the views JK Rowling has been expressing in recent times about the trans people. There is an interesting discussion to be had about how an artist's opinions affect how we feel about their art, but this is not for today's assembly. If you would like to talk about this issue, you can usually find me out and about at break or lunchtime.

Here is a small random selection of things I know. Things I can retrieve from my memory and think about whenever I wish:

I am the master of my fate, I am the captain of my soul

The square of the hypotenuse is the sum of the squares of the other two sides

Han Solo, Luke Skywalker, Princess Leia, Obi Wan Kenobi, Chewbacca, and Darth Vader all lived a long time ago in a galaxy far far away

9.81 m/s²

Lundi mardi mercredi, jeudi vendredi, samedi et dimanche, la semaine recommence

3.14 but I'd like to know more

Smells like teen spirit, in bloom, come as you are, breed, lithium, polly, territorial pissings, drain you, lounge act, stay away, on a plain, something in the way

A long time ago is an interesting and unusual way to start a science fiction movie

The best way to scare a tory is to read and get rich

All of these things have been stuck in my brain for at least a decade. Some of them over three decades.

Some of you here will be able to name Leicester City's first team, or sing along with your favourite song word perfectly barely even having to think about it, or quote lines from your favourite movie, or play a piece of music from memory, or recite Invictus.

As a teacher I have spent many years thinking about, and reading about, how we learn things. How we get knowledge to stick in our brain. Not just for today and tomorrow but stick in our brain for the long haul.

An extract:

Snape pulled out his wand from an inside pocket of his robes and Harry tensed in his chair, but Snape merely raised the wand to his temple and placed its tip into the greasy roots of his hair. When he withdrew it, some silvery substance came away, stretching from temple to wand like a thick gossamer strand, which broke

as he pulled the wand away from it and fell gracefully into the Pensieve, where it swirled silvery-white, neither gas nor liquid.

This description of a memory has stuck in my head for many years, since I first read it out loud to my eldest son during bedtime stories. I have thought about it a great deal, because it is a rather lovely description of what a memory might be like if it were a tangible thing, and because it puts me in mind of my favourite description of what memories actually are: Daniel Willingham, cognitive scientist suggests

Memories are the residue of thought

I suppose the residue to be the swirly white gossamer strand Rowling described.

Incidentally, I looked up the meaning of residue for this assembly and found it to be as poetic as Willingham's words:

Residue: a small amount of something that remains after the main part has gone

A small part of what? Why has a bit remained? Where has the main part gone?

One of the brilliant things about *memories are the residue of thought* is it tells us exactly how to make memories. If we want a piece of information to get stuck in our heads, we must think about it. A lot. We remember best what we think about the most. And if we think about something enough times there will eventually be enough residue left over for us to retrieve the thing in its entirety whenever we wish. Even in many years' time.

If we think about them enough, we will be able to remember the Leicester City team, or words to a poem, or a quote from a scene or a play, or, like the mighty Jack Reacher, be able to call an entire song to mind as if we were listening to it on the radio. Of course, this process works for academic knowledge too. Whether we want to remember psychological theories, or physics equations and constants, or historical events or an analysis of a piece of literature, all we need to do is think about it. A lot.

In the examples of a football team and popular music and poetry getting the knowledge to stick can seem effortless because they are things we enjoy thinking about. It can be more difficult with academic knowledge, at least initially.

Firstly, we have to be more disciplined in our approach to thinking about academic information. Particularly outside of lesson time. This is where retrieval practice comes in. Look, cover, test, check, quizzes, cue cards are all ways of getting ourselves to think about knowledge we want to commit to memory.

Secondly, we have to learn to enjoy academic learning. And we absolutely should enjoy learning, because learning is amazing. And getting cleverer feels amazing.

As an aside, the things other people know and can remember give us a big clue as to what they spend their time thinking about. The sort of person they are. The small bits of knowledge I shared earlier give you some clues as to what I have spent the last 40 odd years thinking about....

In conclusion, we remember best what we think about the most. As you work through your KS5 courses and prepare for trial and real exams you need to make sure you are spending time thinking about your subjects. Use retrieval techniques, and of course read, to help you with your academic thinking.

Thank you for listening and have a good day.