

My name is Dawn Longhurst, a current Year 4 teacher at Beanfield Primary School. Like many of us, I am someone who loves to learn and have become increasingly more fascinated with the science behind how we learn. It was for this reason that when I saw the opportunity to apply for Ambition Institute's Masters Degree in Expert Teaching, with the support from my school and the Trust, I decided to apply. Fast forward two years later and I have just attended my graduation ceremony, passing with merit.

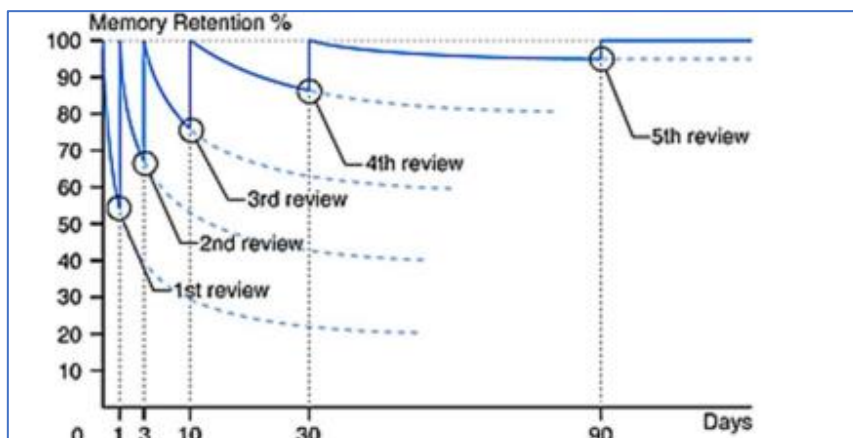


I struggled to pinpoint what I wanted to write about in this blog, having learnt so much, where did I start?! I then remembered at the end of any conference or reading I did, I was always asked the same question – 'What were your key takeaways?' So, I intend to challenge myself here to share just a few of my key learning points from each of the six modules...here goes!

Retrieval

How many times have we despaired after revisiting a previously taught concept to receive a sea of blank faces staring back, the pupils seemingly having forgotten everything you have said?! The good news? This is completely normal according to the Ebbinghaus 'Forgetting Curve' (Ruger & Bussenius, 1964), and can be a good thing if used effectively. For example: with strategies such as spaced, low stakes retrieval quizzes. The curve presents learning as something that decays rapidly; however, using retrieval quizzes in my own practice, each instance that I allowed time for some forgetting, the next time pupils revisited the same words and effortfully retrieved from their long-term memories, I could see retrieval strength improving each time, therefore helping knowledge to stick and slowing the forgetting process.





Ebbinghaus 'Forgetting Curve' (Ruger & Bussenius, 1964)

Hinge questions

Next up, I wanted to look at how I could improve my formative assessment of all individuals in a whole class situation. Wiliam (2015) recommends the use of hinge questions at pivotal points in lessons with the rest of the lesson depending on the response of the pupils', as to whether the lesson continued or took a different course to respond to needs in the moment. Distractors were included in my multiple-choice hinge questions to provide plausible yet incorrect answers to check for misconceptions (Fletcher-Wood, 2018).

Although perhaps not suitable in every lesson and sometimes requiring a lot of forward planning, an advantage to this was the requirement of a whole class response by use of finger voting or whiteboards after thinking time. This allowed me to see individuals' thinking therefore, allowing me to be more confident in my judgement of understanding before moving on or reacting to the needs of my pupils.

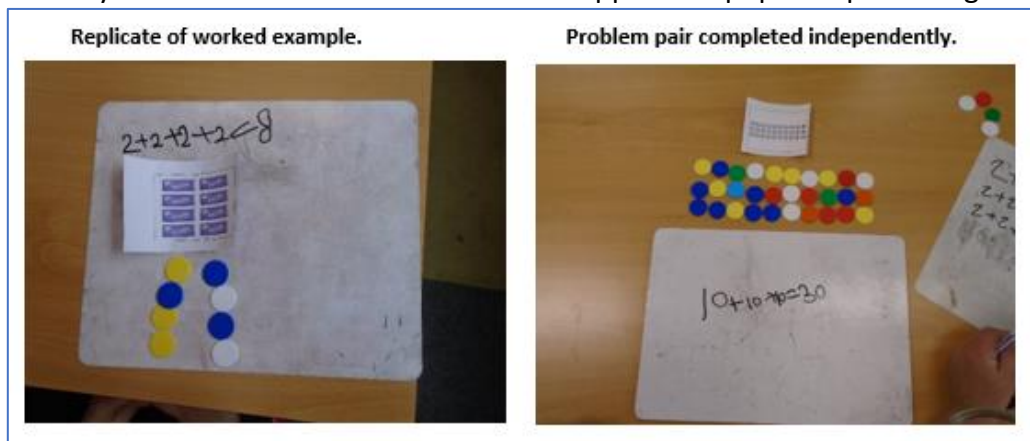
What do deciduous trees do?

- 1 - Lose their leaves in the Autumn.
- 2 - Stay green all year round.
- 3 - Lose their leaves in Spring.

Hinge question example for Year 1 science lesson.

Worked examples

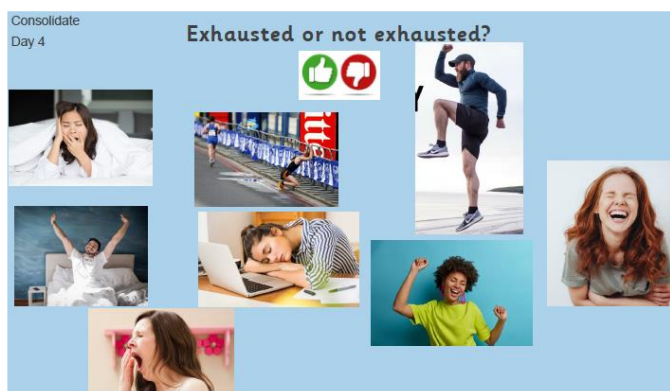
As we know, a challenge to the optimisation of learning is an overload of information in the working memory. Working memory is limited in capacity and when given too much information at once, it is likely to cause a cognitive overload causing learning to be lost or misunderstood. I attempted to reduce intrinsic load in my practice with the use of worked examples to scaffold the learning for pupils by way of providing a “problem that has already been solved for the learner” (CESE, 2017, p.7). These examples appeared to support pupils learning, reducing the chances of cognitive overload and allowed tasks to be accessed more independently with a noticeable reduction in the support the pupils required to get started.



Year 1 repeated addition lesson.

Non-examples

The importance of knowledge, is relevant particularly in primary as they will not have such established schemas yet. For example, pupils must know their phonics sounds to be able to apply them to their reading. This highlights the need to consider prior knowledge continuously when introducing new learning. Using positive worked examples alone may not always be enough and so the use of non-examples can also support in ruling out other interpretations and carefully guiding the understanding of the pupils by comparing similarities and differences between the examples (Engelman and Carnine, 1991). This explicit and granular approach of introducing new learning supported my pupils in deepening understanding and developing schemas further.



Year 1 vocabulary session using examples versus non-examples as a talking/voting point.

Positive habits

Scaffolding pupils to access learning not only supports consolidation of learning but previous experiences of these successes these are thought to also foster motivation (Bandura, 1994). Self-efficacy is a person's belief that they can achieve a specific task in the future based on previous personal or vicarious experiences of success. Enabling pupils to experience success by creating positive habits within the classroom means that routines and rules that may otherwise take up room in working memory become automatic. In my trial I chose regular reading time each morning for all. In time, this improved skills, enabled the task to feel less effortful, more achievable and therefore motivation was higher to continue.

Variation

Returning to my retrieval quizzes, I began to see that although promising results in terms of retrieval and good levels of understanding, I had limited evidence of pupils transferring and using these words outside of retrieval sessions. Pan and Rickard (2018) suggest variation of tasks de-contextualise learning and this may support pupils to become less dependent on the multiple-choice conditions in my original trial. I introduced verbal construction of sentences, flashcards and write a sentence tasks alongside multiple choice quizzes. This, alongside my modelling of transferring words into different subjects and contexts, enabled pupils to make connections and build schemas further.

There we have it, just a few of many learning points to share from a long two years! It wasn't always the easiest of two years, it turns out that a lockdown then returning to teaching, alongside finding time for research, implementation and submitting what felt at times like endless drafts and refined submissions, certainly made for an interesting time! But the experience has also been such a valuable one in terms of what I have learnt and I would recommend it to anyone. It has allowed me to trial strategies, consider benefits and limitations and how it all applies to my own practice, learning a lot about learning itself, but also myself as a teacher. This is something I am now keen to continue and having moved from Year 1 to Year 4 this year, I am excited to see how I can begin to transfer my own learning to my new context and keep on learning from my experiences. After all, how can we be role models for learning if we are not always learning ourselves?!

References

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