



# IS THERE EVIDENCE FOR THAT?

Promoting research-led teaching at Wilson's School

## SPRING TERM UPDATE

Publication of this latest newsletter coincides with brighter days and the early signs of spring! Alongside the usual roundup of all things teaching and learning, you will find a closer look at metacognition and a review of the second book from Peps Mccrea's series on high impact teaching. A review of book one is to follow in the summer term. Enjoy!

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## USING RETRIEVAL PRACTICE

Are you eager to include more opportunities for retrieval practice in your lessons? Do you want to help students recall information from long term memory in a low-stakes, low-risk activity? Before you go all-in on retrieval practice, take a look at this [accessible ebook](#) written by retrieval practice guru Kate Jones (@KateJones\_teach). This ebook addresses some of the common myths, mutations and mistakes surrounding retrieval practice.

One of the most important, and arguably trickier, things to get right when it comes to retrieval practice is developing tasks with the correct degree of desirable difficulty. [In this blog post](#), David Didau explains the theory underlying retrieval practice and suggests three simple techniques to get the most out of this tool in the classroom.

# WHAT'S HAPPENING IN THE BLOGOSPHERE?



1. How can we improve the participation ratio - the number of students actively engaged - in a lesson? [Adam Boxer](#) views lessons through a 'ratio lens' and suggests strategies for maintaining a high ratio.
2. What is it like to disclose abuse to an adult? [This account](#) written by an abused young person describes the impact the abuse had on their life as well as their experience of disclosure.
3. Teacherhead writes about [brilliant questioning sequences](#) using examples from observations in the classroom.
4. You've added something new to your pedagogy, but have you also introduced the dreaded 'lethal mutation'? [This article](#) from Evidence Based Education explains what they are and how to avoid them.



## INSTRUCTIONAL COACHING

There is good evidence for the effectiveness of instructional coaching, but what is it?

- Instructional coaching, [explained in this article](#), is when a teacher and coach work together towards a mutually identified goal to improve the teacher's practice. A deeper exploration of the purpose of this type of coaching is discussed [here](#).
- In this [short clip](#) (Twitter), two colleagues describe how a coaching-style development model was introduced in their school. The full article describing the case study can be [accessed here](#) from the Chartered College of Teaching. Other articles from the recent edition of Impact focusing on teacher development can be found [on their website](#).

# METACOGNITION AND SELF-REGULATION



Metacognition is a measure of students' awareness of how they learn, and of their strengths and weaknesses. It encompasses students' own techniques to improve their learning and to become motivated to learn. The EEF report highlights three key elements necessary for metacognition that teachers can utilise to help students.

- Cognition: the thinking processes involved in learning, knowing and understanding.
- Metacognition: students monitor their own learning and select appropriate strategies.
- Motivation: willingness to persevere and take on challenging learning tasks.

## FINDING OUT MORE...

1. [In this series of articles](#) for SecEd, the implementation of a metacognitive strategy as a whole school teaching and learning policy is explained in detail.
2. Listen to this [SecEd podcast](#) episode for a discussion on how to introduce and teach metacognitive approaches to students.
3. [This one page summary](#) from the EEF highlights seven recommendations for introducing metacognition and self-regulated learning.

## ON THE LIST: READING AND LISTENING

- Pressed for time? Evidence Snacks has got you covered! [Sign up here](#) for a weekly five minute email on a range of evidenced based topics including routines and expectations, group behaviour and how to redeploy attention .
- [In this episode](#) of 'Mind the Gap', Dylan Wiliam joins in to discuss good teaching, learning theories, and implementation. Keen to hear more about participation ratio? Adam Boxer features [in this episode](#) of 'Progressively Incorrect' to discuss ratio and setting good quality homework.
- Investigative journalist Hannah Barnes uncovers the story behind the Gender Identity Development Service (GIDS) at the Tavistock, including testimonies from young patients, [in her new book](#). She speaks about her book and its findings [in this episode of The News Agents](#).

## 'MEMORABLE TEACHING.' - PEPS MCCREA

## 'Memory is the residue of thought' - Willingham

In the second book of this series on high impact teaching, Peps Mccrea explains the importance of memory when building durable learning. Over the course of this short book, he sets out nine principles teachers can use to manage student thinking.

The reader is reminded of the basic systems of memory, consisting of two interconnected components. These are long-term memory (LTM) and working memory (WM). LTM is described as a 'mental model of the world', constantly fluctuating and modified by our WM. Connecting WM to LTM involves attention, transfer to short term memory, then elaboration where we incorporate knowledge into our LTM.

Our aim as teachers is to facilitate students' development of LTM that is both deep and well structured, and durable. The nine principles are presented in three sections: harness, direct and amplify.

Harness

- **Manage information.** Create an environment that minimises distractions, including you as a teacher interrupting focused student work or providing unnecessary complex or redundant information.
- **Streamline communication.** Consider how students receive information, the different tools available and the clarity of the information presented. When selecting multiple modes, consider that attending to an image and spoken words at the same time can increase the information received while presenting text and speech together does the opposite.
- **Orient attention.** Attention is a limited resource but it is crucial in allowing information to access our WM. As teachers we need to direct students' attention with a high degree of precision through gesture, voice, or highlighting text.
- **Regulate load.** This is about reducing cognitive load for our students by considering factors leading to overload. Mccrea sets out strategies in detail to vary demand.

Direct

- **Expedite elaboration.** Elaboration is when we use information from our WM to add to or alter our LTM. Students' knowledge is unavoidably limited as they begin to add to LTM. By priming (preparing students to learn) and tethering (attaching new knowledge to what exists) we can help students make durable connections in their LTM.

"I doubt you'll find an education book with more useful insights per minute of reading time."

*Dylan William*

## MEMORABLE TEACHING

Peps Mccrea

- **Refine structures.** Do you wonder why students sometimes struggle with straightforward maths in a science lesson? Often context and concept are encoded together in our LTM, making it difficult to adapt a concept to a different context. This is the result of LTM that is in the early stages simple or shallow. Providing variation, or examples where small changes are made from the original, and definition, where students provide precise descriptions and discriminate from similar concepts, can help separate context and concept.
- **Stabilise changes.** Memory will decay if it is not used, so it is the job of teachers to deliberately help students to remember. This is retrieval. Retrieval is most effective when it is low stakes, about prior knowledge and done with minimal assistance, spaced and interleaved.

Amplify

- **Align pedagogies.** This is all about making the right pedagogical choice for the situation and level of knowledge students possess. The teacher may choose to establish an outline of the content to be learned via direct instruction then support students as the progress to independent practice.
- **Embed metacognition.** Building the capacity for metacognition in our students is no different than learning any other concept. In our teaching, we can emphasise the reasons for taking a certain approach to uncover for students how learning happens. Encourage self-regulation by asking students to check in with what they are thinking at given points. Metacognition also taxes WM so must be introduced gradually and incorporated regularly for maximum impact.

Mccrea ends by reminding us that memorable teaching is untrendy, takes time and requires patience. It is not easy, but is a powerful technique which benefits students immeasurably.

**'Schooling is a one-shot deal for our kids. We should spend our time on the things that are going to have the biggest impact' - Wiliam**

