**What are metacognition and self-regulated learning?**

Freya fiddled with her pencil case. Every Friday, she would experience a quiet dread when facing the weekly spelling test. This week, though, she felt more confident than before. After a couple of weeks characterised by annoying mistakes, she had worked hard in readiness for this week’s test. She had devised two of her own mnemonics and she had practised her ‘le’ ending words, as well as ‘surprise’ with an ‘r’, repeatedly.

As Mr Thomas began the spelling test, Freya listened hard. She knew that sometimes she would feel a little pressure when her teacher moved quickly onto the next spelling, but that this week she would listen carefully and remember what she had practised.

One or two words were no doubt tricky, but Freya had weighed up her options each time and she was utterly confident of her success. Before Mr Thomas had a chance to cycle through the correct spellings, Freya sat up straight, with a smile lighting up her face, fuelled by quiet satisfaction. She already thought about her new spelling routine and how she would stick to it next week too.

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| This spelling test anecdote is a familiar scene that is played out in classrooms across the country. The actions and thoughts of Freya, as she is learning her spelling, inside and outside of the classroom, is simply the typical stuff of everyday learning and school.And yet, despite much of her thinking and strategies remaining hidden and implicit in the classroom, her success is instructive. Freya exhibits the thoughts and actions of a successful self-regulated learner and she deploys crucial metacognitive strategies.  Why does this matter?Well, there is a strong body of research from psychology and education demonstrating the importance of metacognition and self-regulation to effective pupil learning. The Sutton Trust-EEF [Teaching and Learning Toolkit](https://educationendowmentfoundation.us8.list-manage.com/track/click?u=cb569f99caaaedff117cdc74c&id=794247381b&e=ab6bf9c839) – which summarises international evidence – rates 'Metacognition and self-regulation' as a high-impact, low-cost approach to improving the attainment of disadvantaged learners.  But what is it? Essentially, self-regulation is about the extent to which learners like Freya are aware of their strengths and weaknesses and the strategies they use to learn.It describes how they can motivate themselves to engage in learning and develop strategies to enhance their learning and to improve. It will look different for learners of different ages, and for different tasks, but teachers will recognise these characteristics in their most effective learners.   |

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**What does a self-regulated learner look like?**

Zimmerman gives a helpful description of what a successful self-regulated learner looks like: [1]

'These learners are proactive in their efforts to learn because they are aware of their strengths and limitations and because they are guided by personally set goals and task-related strategies, such as using an arithmetic addition strategy to check the accuracy of solutions to subtraction problems. These learners monitor their behaviour in terms of their goals and self-reflect on their increasing effectiveness. This enhances their self-satisfaction and motivation to continue to improve their methods of learning.'

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| Self-regulated learning can be broken into three essential components that teachers need to know about to help their pupils to develop into successful learners:* **Cognition** is the mental process involved in knowing, understanding, and learning. By cognitive strategies, we mean skills like memorisation techniques, or subject-specific strategies like making different marks with a brush or different methods to solve equations in maths. This is the bread and butter of good teaching; cognitive strategies are fundamental to acquiring knowledge and completing learning tasks.
* **Metacognition** is about the ways learners monitor and purposefully direct their learning. For example, having decided that a particular cognitive strategy for memorisation is likely to be successful, a pupil then monitors whether it has indeed been successful and then deliberately changes (or not) their memorisation method based on that evidence. By metacognitiv strategies, we mean the strategies we use to monitor or control our cognition, such as checking that our memorisation technique was accurate or selecting the most appropriate cognitive strategy for the task we are undertaking.
* **Motivation** is about our willingness to engage our metacognitive and cognitive skills and apply them to learning. Motivational strategies will include convincing oneself to undertake a tricky revision task now – affecting our current well-being – as a way of improving our future well-being in the test tomorrow.

Cognition, metacognition and motivation all interact in complex ways during the learning process.For Freya, she deployed cognitive strategies, like using mnemonics and doing some self-testing practice at home. She used metacognitive strategies to plan her spelling practice, recognising why using a mnemonic was the right tool for the job, whilst monitoring her own difficulties with time pressures during the test. Finally, Freya mustered the motivational strategies to engage in repeated practice and to persevere during a pressured challenge.Metacognition is the focus of this email series, but that does not mean cognition and motivation are any less important. In fact, it is impossible to be metacognitive without having different cognitive strategies to hand and possessing the motivation and perseverance to tackle problems and apply these strategies. |

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