Education Endowment Foundation

Metacognition and Self-Regulated Learning
A starter kit

What is metacognition?

Metacognition and self-regulation approaches support pupils to think about their learning more explicitly, often by teaching them specific strategies for planning, monitoring, and evaluating their learning.

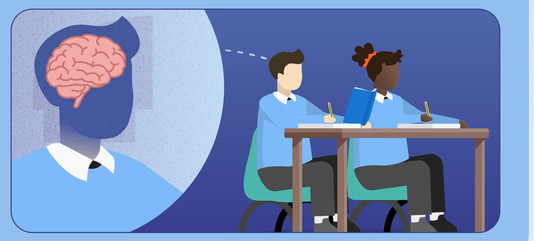
What is this starter kit?

Building independent learning habits into teaching can be challenging. Evidence tells us that explicitly teaching metacognition can support pupils to think about their own learning more purposefully, leading to more independent learning behaviours.

This resource can be used as a starting point for schools who want to support pupils to build more independent learning behaviours.

It offers advice and recommends specific tools to help build staff knowledge around metacognition, and also provides suggested activities for professional development.

While some metacognitive strategies can be described generically, they improve only through practice—applied to subject-specific content and tasks. Other EEF guidance reports, such as those on literacy and mathematics, give more detailed subject-specific guidance for teachers.



Why metacognition?

The EEF's Teaching and Learning Toolkit suggests the average impact of metacognition and self-regulation approaches is high (+8 months additional progress).

Explicitly teaching strategies to help pupils to plan, monitor and evaluate specific aspects of learning can be effective. Research suggests these should be taught and applied within the usual curriculum content.

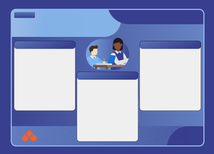
Strengthening pupils' metacognitive knowledge of themselves as learners, of strategies, and of tasks can support greater independence and resilience during learning. This remains a promising area of practice for closing the disadvantage gap.

Find out more

The EEF's guidance report **Metacognition and Self-Regulated Learning**, offers practical advice on how teachers can develop their pupils' metacognitive skills, whilst our **Effective Professional Development** guidance report offers further evidence-informed approaches to support schools in developing professional development that improves teacher practice.

Guidance report
Metacognition and Self-Regulated Learning

Guidance report
Effective Professional Development

Purpose of activity	Resource
Building a shared professional understanding	**Metacognition: A Brief Explainer** This short animation aims to cut through the complexity by providing a clear example of metacognition in practice. It could be shared with staff during training to build knowledge. To watch the animation search '**EEF Metacognition**' on **YouTube**
Consolidating understanding	**The Metacognitive Process: Supportive Learning** Leaders and teachers might find this resource useful as a good starting point for discussions linking evidence with practical strategies.
Recommendation 2 Explicitly teach pupils metacognitive strategies, including how to plan, monitor, and evaluate their learning.	**Metacognitive strategies** Pupils need support to **plan, monitor,** and **evaluate** effectively. This tool outlines examples of effective metacognitive strategies which can be explicitly taught, modelled and scaffolded to help pupils use them with increasing independence.
	The seven-step model This model offers a useful framework to support teachers in developing their pupils' independence. This tool includes an editable page with prompt questions to support planning.
Recommendation 4 Promote and develop metacognitive talk in the classroom.	 **Promoting metacognitive talk** This tool offers question prompts across the metacognitive cycle, structured around knowledge of task, strategies, and self. It can be used to model and guide purposeful talk that supports independent, reflective learners. It includes an editable page for planning and training purposes.
Recommendation 5 Set an appropriate level of challenge to develop pupils' self-regulation and metacognition.	**Scaffolding pupils' use of metacognitive strategies** This framework outlines verbal, visual, and written scaffolds to promote pupils' increasingly independent use of metacognitive strategies over time. It supports teachers to use the principle of 'least help first'.