

# Metacognition and Self-Regulated Learning

## Summary of recommendations

### Recommendation 1

Schools should support teachers to understand the importance of using strategies to develop their pupils' metacognitive knowledge.

- Self-regulated learners are aware of their strengths and weaknesses and can motivate themselves to engage in, and improve, their learning.
- Developing pupils' metacognitive knowledge of how they learn—their knowledge of themselves as a learner, of strategies, and of tasks—is a common feature of successful metacognition approaches
- Teachers should support pupils to plan, monitor, and evaluate their learning through explicitly teaching, modelling, and scaffolding the use of metacognitive strategies.

### Recommendation 2

Explicitly teach pupils metacognitive strategies, including how to plan, monitor, and evaluate their learning.

- Explicit instruction in metacognitive strategies can improve pupils' learning.
- While concepts like 'plan, monitor, evaluate' can be introduced generically, the strategies are mostly applied in relation to specific content and tasks and are therefore best taught this way.
- A series of steps—beginning with activating prior knowledge and leading to independent practice before ending in structured reflection—can be applied to different subjects, ages, and contents.

### Recommendation 3

Model your own thinking to help pupils develop their metacognitive and cognitive skills.

- Modelling by the teacher is a cornerstone of effective teaching; revealing the thought processes of an expert learner helps to develop pupils' metacognitive skills.
- Teachers should verbalise their metacognitive thinking as they approach and work through a task—'What do I know about problems like this?', 'What ways of solving them have I used before?', 'What do I need to do to be successful in my learning?'
- Scaffolded tasks, like worked examples, allow pupils to develop their metacognitive and cognitive skills without placing too many demands on their mental resources.

### Recommendation 4

Promote and develop metacognitive talk in the classroom.

- As well as explicit instruction and modelling, classroom dialogue can be used to develop metacognitive skills.
- Pupil-to-pupil and pupil-teacher talk can help to build knowledge and understanding of cognitive and metacognitive strategies.
- However, dialogue needs to be purposeful, with teachers guiding and supporting the conversation to ensure it is challenging and builds on prior subject knowledge.

### Recommendation 5

Set an appropriate level of challenge to develop pupils' self-regulation and metacognition.

- Setting the right level of challenge is crucial to allow pupils to develop and progress their knowledge of tasks, strategies, and of themselves as learners.
- Teachers need to ensure that challenge is set at an appropriate level.
- Teachers can support pupils' motivation by giving feedback on a range of goals.
- Tasks should be created that do not overload pupils' cognitive capacity, particularly when they are expected to apply new strategies.

### Recommendation 6

Explicitly teach pupils how to organise, and effectively manage, their learning independently.

- Teachers should explicitly support pupils to develop independent learning skills.
- Carefully designed guided practice, with support gradually withdrawn as the pupil becomes proficient, can allow pupils to develop skills and strategies before applying them in independent practice.
- Pupils will need timely, effective feedback and strategies to be able to judge accurately how effectively they are learning.
- Teachers should also support pupils' motivation to undertake the learning tasks.

- Develop teachers' knowledge and understanding through high quality professional development and resources.
- Senior leaders should provide teachers with time and support to make sure approaches are implemented consistently.
- Teachers can use tools such as 'traces' and observation to assess pupils' use of self-regulated learning skills.
- Metacognition shouldn't be an 'extra' task for teachers to do but should be built into their teaching activities.



### Read more

Metacognition and Self-regulated Learning guidance report