



Meta Learning & Thinking Skills

Recommendations for metacognition

Poster discussion

- Choose 1 topic
- Read the recommendations
- Discuss to understand
- Give 5 examples for transfer into own context
- Formulate a MANTRA!





METACOGNITION AND SELF-REGULATED LEARNING

Summary of recommendations

1	2	3	4	5	6	7
Teachers should acquire the professional understanding and skills to develop their pupils' metacognitive knowledge	Explicitly teach pupils metacognitive strategies, including how to plan, monitor, and evaluate their learning knowledge	Model your own thinking to help pupils develop their metacognitive and cognitive skills	Set an appropriate level of challenge to develop pupils' self-regulation and metacognition	Promote and develop metacognitive talk in the classroom	Explicitly teach pupils how to organise and effectively manage their learning independently	Schools should support teachers to develop knowledge of these approaches and expect them to be applied appropriately
 Self-regulated learners are aware of their strengths and weaknesses, and can motivate themselves to engage in, and improve, their 	 Explicit instruction in cognitive and metacognitive strategies can improve pupils' learning. 	 Modelling by the teacher is a cornectione of effective teaching; revealing the thought processes of an expert learner 	 Challenge is crucial to allow pupils to develop and progress their knowledge of tasks, strategies, and of themselves as learners. 	 As well as explicit instruction and modelling, classroom dialogue can be used to develop metacognitive skills. 	Teachers should explicitly support pupils to develop independent learning skills.	 Develop teachers' knowledge and understanding through high quality professional development and resources.
 Developing pupils' metacognitive knowledge of how they learn—their knowledge of themselves as a learner, of strategies, and of tasks—is an effective way of improving pupil outcomes. Teachers should support pupils to plan, monitor, and evaluate their 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. 	 beins to develop pupils' metacognitive skills. Teachers should verbalise their metacognitive skills. Teachers should verbalise their metacognitive thinking (What do I know about problems like this? What ways of solving them have I used before?) as they approach and work through a task. Scaffolded tasks, like worked examples, allow pupils to develop their metacognitive and cognitive skills without placing too many demands on their mental resources. 	 However, challenge needs to be at an appropriate level. Pupils must have the motivation to accept the challenge. Tasks should not overload pupils' cognitive processes, particularly when they are expected to apply new strategies. 	 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. 	 Carefully decigned 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. 	 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 'sktra' task for teachers to do but should be built into their teaching activities.

