Summary of recommendations

1. Teachers should acquire the professional understanding and skills to develop their students’ metacognitive knowledge
   - Self-regulated learners are aware of their strengths and weaknesses, and can motivate themselves to engage in, and improve, their learning.
   - Developing students’ metacognitive knowledge of how they learn – their knowledge of themselves as a learner, or strategies and of tasks – is an effective way of improving student outcomes.
   - Teachers should support students to plan, monitor, and evaluate their learning.

2. Explicitly teach students metacognitive strategies, including how to plan, monitor, and evaluate their learning
   - Explicit instruction in cognitive and metacognitive strategies can improve students’ 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.

3. Model your own thinking to help students develop their metacognitive and cognitive skills
   - Modelling by the teacher is a cornerstone of effective teaching, revealing the thought processes of an expert learning helps to develop students’ 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 students to develop their metacognitive and cognitive skills without placing too many demands on their mental resources.

4. Set an appropriate level of challenge to develop students’ self-regulation and metacognition
   - Challenge is crucial to allow students to develop and progress their knowledge of tasks strategies and of themselves as learners.
   - However, challenge needs to be at an appropriate level.
   - Students must have the motivation to accept the challenge. Tasks should not overload students’ cognitive processes, particularly when they are expected to apply new strategies.

5. Promote and develop metacognitive talk in the classroom
   - As well as explicit instruction and modelling, classroom dialogue can be used to develop metacognitive skills.
   - Student-to-student and student-to-teacher talk can help 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.

6. Explicitly teach students how to organise and effectively manage their learning independently
   - Teachers should explicitly support students to develop independent learning skills.
   - Carefully designed guided practice, with support gradually withdrawn as the student becomes proficient, can allow students to develop skills and strategies before applying them in independent practice.
   - Students will need timely, effective feedback and strategies to be able to judge accurately how effectively they are learning.
   - Teachers should also support students’ motivation to undertake the learning.

7. Schools should support teachers to develop knowledge of these approaches and expect them to be applied appropriately
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