



Teaching and Learning Excellence @BSM

April 2022: Metacognition and self-regulated learning

A Teachers' beliefs about their students and what they can achieve have a substantial impact on students' learning and progress.

More than educational jargon, the EEF rate metacognition and self-regulation as 'high impact for low cost', adding +7 months of progress. 'On a very basic level, it's about pupils' ability to monitor, direct and review their learning. Effective metacognitive strategies get learners to think about their own learning more explicitly, usually by teaching them set goals, and monitor and evaluate their own academic progress' (EEF). Pupils who learn to learn and think about thinking are more powerful learners. They become aware of their strengths and weaknesses and the strategies they use to learn. Pupils motivate themselves to engage in learning and develop strategies to enhance their learning and therefore improve. It is teachable and sits across ALL subjects. For example, it allows pupils to recognise that they have trouble applying formulas in maths, think about the maths problems they have solved before, and the strategies they used, apply these strategies, assessing whether they are working or not and try a different strategy if the one they are using is not effective.

- FOCUSED
- IDENTIFIED
- RELENTLESSY CHALLENGING
- SCAFFOLDED
- TARGETTED



How does it link into our whole school teaching and learning? Quality FIRST teaching

- **Modelling:** involve discussions about what you are thinking while carrying out a task. Verbalise the thought processes used to consider, analyse, and solve problems. This may be as simple as 'thinking aloud'. This can help students to focus and better understand their thought processes. THEN ASK PUPILS TO FOLLOW THE SAME PRINCIPLES.
- **Retrieval and connectiveness:** focus on activating prior knowledge, modelling the application of knowledge and skills, and providing ample opportunity for independent practice and reflection. Link back to prior learning and strategies, incorporate connectiveness and elaboration in explanation, pull on what they already know and have experienced through retrieval.
- **Support pupils to plan, monitor and review:** explicitly teaching skills in these areas, and structuring work around these phases, will give students the opportunity to gradually internalise these techniques and use them to take control of their own learning. Build into your planning – plan, do, review and allow opportunities for collaborative work and sharing ideas before completion of a task.
- **Worked examples:** demonstrate the steps required to complete a task or solve a problem. A scaffolded learning approach reduces a learner's cognitive load, so skill acquisition can become easier. The teacher presents a worked example and explains each step. Later, students can use the worked examples during independent practice, and review and embed new knowledge.
- **Teaching specific strategies, including revision techniques:** This ensures that they are less likely to experience cognitive overload, allowing them to move on to higher-level thinking. You could use expression or word mnemonics, acronyms, map from memory and/or acrostics. Active strategies for learning and forced recall tasks.
- **Effective questioning:** both in terms of using questions to engage students, to monitor their progress and stimulate their thinking, as well as valuing questions from students as a form of feedback and an opportunity for extension of learning
- **Assessment and Feedback Loop:** feedback closes the gap between current and desired performance and should FEEDFORWARD improving the work and not the pupil. Give them something to do to improve next time, without explicit instruction pupils will not know how to do this. Give them strategies and steps to take allowing them to know their strengths and weakness for learning.



Deliberate practice is planning on purpose for the pupils in front of you to maximise progress for all

Further reading:
 EEF research report, Metacognition and self-regulated learning
 Cognitive Load Theory, Steve Garnett
 The complete Learners Toolkit, Jackie Beere
 The Metacognition Handbook: A practical guide, Jennifer Webb
 Responsive Teaching, Harry Fletcher-Wood





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February 2022: Effective Questioning

Classroom strategies – remember FIRST (focused, identified, relentlessly challenging, scaffolded, targeted)

Modelling – explicitly instruct and demonstrate what is needed as part of your routine classroom explanation. This can be done using visualisers, I do we do you do activities, WAGOLL's, sharing and analysis of criteria/requirements.

Thinking about thinking – ask pupils to review prior work or learning (including assessments) before completing a similar activity or knowledge piece. Ask them to consider or discuss their strengths and areas for development before beginning a piece of work or thinking opportunity. Ask 'when have we done this before?' 'What did I do well?' 'What do I need to do this time to avoid repeating mistakes or to improve?'

Retrieval activities – activate prior knowledge through starters, memory maps, low stakes quizzes, Home Learning tasks.

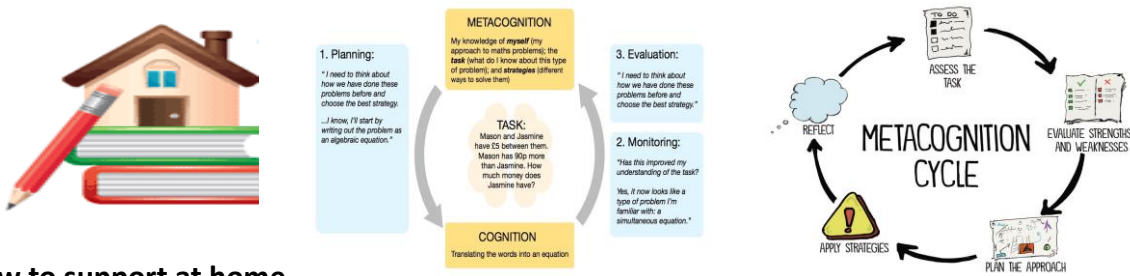
Plan ahead – When planning lessons, consider activities for pupils to plan, do and review; talk for writing, group work, thinking time, redrafting, peer and self-assessment. Promote opportunities for metacognitive talk in the classroom.

BUG the question – help pupils understand the questions by BUGing those written down. BOX the command word, UNDERLINE key words and the GLANCE over the question whilst answering. Explain what is needed and how, asking pupils to analyse the questions before completing them.

Target setting – make sure your expectations are appropriate for the individual pupil. Challenge is crucial for development and so target setting must match, include this in feedback.

Learning techniques – explicitly teach pupils how to organise and effectively manage their learning independently. Include revision techniques in lessons such as mapping from memory, active reading, quizzing each other and mnemonics.

DIRT and feedback – pupils need timely, effective feedback and strategies to enable them to judge how effectively they are learning and how to specifically improve. They need to know what to do and how to do it in preparation for reviewing learning next time. Give them instructions.



How to support at home

Ask your children about their learning – what feedback have they received in assessments? What did they do well? What do they need to work on? Question them and then ask how they will do this next time?

Encourage your child to complete DIRT in their books – ask your child to show you their books and encourage them to reply to all feedback, improve their spellings, revisit work and improve it.

