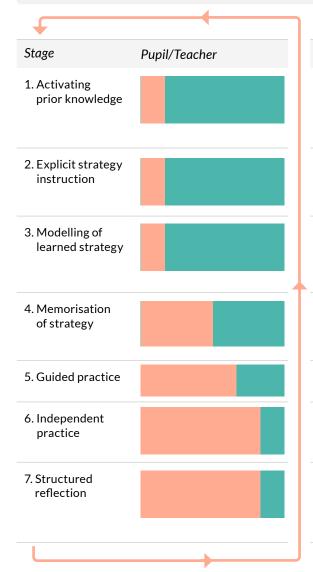
SUPPORTING INDEPENDENT PRACTICE: THE SEVEN-STEP MODEL

Key Stage 1 Maths lesson: 'Counting on method'



Teaching the 'counting on method' in Key Stage 1 maths can be complex. This short worked example shows how the seven-step model can be used to teach this new strategy over the course of one or two lessons, within a wider sequence of learning. The arrows within the model highlight the fact that the seven-step model is to be used flexibly and in response to feedback from learners.



Habits that support independence

Context: Pupils will be familiar with a range of strategies to solve simple addition problems.

- Share a problem on the board: 'Hannah has three marbles and Jake has four marbles. How many do they have altogether?'
- Pupils to have a go at solving the problem.
- Pose the question: 'What strategies did we use?' to prompt a discussion about different strategies.

Teacher:

'Lots of you used the 'counting all' strategy to find the answer. My friend showed me this method (models counting). Today we are going to learn a more efficient strategy for adding two one-digit numbers: counting on. It's more efficient because you don't have to do as much counting. It's tricky because you must hold the biggest number in your head.'

- Model and share the following steps with the class to support pupils to monitor their success:
 - 1. Choose a start number from the calculation.
 - 2. Hold it in your head.
 - 3. Use your fingers to count on.
- Ask questions from the EEF's Think aloud tool to model the metacognitive processes of an expert learner.
- · Share a new problem on the board.
- Ask pupils: 'What do I need to do first?' Give pupils thinking time before inviting responses: 'What is my next step...? Can anyone spot my mistake?'
- When confident pupils understand the strategy, move on to guided practice.
- Use the 'caterpillar game' to provide the opportunity for purposeful, playful practice of the new strategy.
- For overview of this game see the EEF blog: <u>'The complexity of counting on'</u>.
- Give pupils a caterpillar number track like the one used in their practice and complete single addition calculations using the counting on strategy (up to 20).
- Monitor progress, provide feedback and further modelling specific to the strategy.
- Show a new problem with larger numbers on the board:
- 'Hannah has 20 marbles and Jake has seven, how many do they have altogether?'
- Ask pupils to use the new 'counting on' strategy to solve independently.
- Ask <u>questions</u> to support pupils to evaluate the success of the new strategy: e.g. What will you do next time you are
 asked to solve a similar problem in Maths? Would your start number be 20 or seven? Why?

To find out more...



The EEF's guidance report

Metacognition and Self-regulated

Learning offers practical advice
on how to develop pupils'
metacognitive skills.



The EEF's Improving Mathematics in the Early Years and KS1 and Improving Literacy for KS1 and KS2 reports offer further approaches to supporting pupils.