# Supporting Our Children's Academic Development Through Talk: Using Verbalisation to Promote Metacognition

In 2017, Professor John Hattie of the University of Melbourne published a large scale meta-analysis of the factors which impact children's academic outcomes.  His analysis drew on over 80,000 studies involving over 300 million children worldwide.

Two of the factors that were found to significantly improve children's academic outcomes were metacognition and self-verbalisation:  Essentially, talking through the thinking process; testing out and then reflecting upon the efficacy of various problem-solving strategies.

The UK's Education Endowment Foundation has also produced research to suggest that children who use a metacognitive approach in their learning can make up to 8 months additional progress during their school career.

So how can we embed metacognitive skills in our children and promote effective self-verbalisation?

1. Focus on something your child is interested in and would like to do such as building a model, baking a cake or painting a picture.
2. Encourage them to talk about what they already know about how to do that task before getting started (activate prior knowledge).
3. Let them do the task themselves (independent practice) and support them to talk through their reasoning as they are undertaking the task.
4. Praise your child during the task for showing determination, especially if they are finding it challenging.  (Avoid only praising if they solve the problem – praise the process, rather than the outcome in order to encourage academic resilience and build self-esteem.)
5. Afterwards, invite your child to talk about how well the task went and why.  Would they do anything differently next time?
6. As your child gains confidence with problem solving, gradually make the problems more challenging and complex – such as a multi-piece jigsaw, designing a new Lego building or planning their birthday party.
7. Model a metacognitive approach yourself when solving problems or undertaking tasks at home.  This helps your child to see and hear how adults think through the planning, completion and reflection stages of problem solving.

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You could use these questions to help structure your conversation if you like:

**Step 1 (Accessing Prior Knowledge)**
*When have I come across a problem like this before?  How did I approach it?  Which strategies were useful and which didn't work last time?*

**Step 2 (Independent Practice)**
*Which strategy shall I try first in solving this problem?* (Then allow the child time to work on the problem, changing strategies as they go if needs be.)

**Step 3 (Structured Reflection)**
*How did you get on?  Is that the outcome you wanted?  What worked well and why?  Which strategies weren't useful and why?  What would you do differently next time and why?*

**And finally…**
As adults, we may automatically internalise this three step process because we have many years' experience of solving problems.  However, our children are much less experienced problem solvers, so externalising our thought process by verbalising it provides them with a model to follow:  **Talking Through supports Thinking Through**.



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