

## What is metacognition?



It is the awareness of your own thought processes. We all go through a thought process when we set about completing a task. What we may be unaware of is that thinking process is a learnt process and not a natural one. During our childhood development, we would have been given opportunities to think things through, plan and monitor a task. We would have made mistakes - of which most of us would have learnt from - and would use this knowledge for future tasks.

## Why focus on metacognition in school?

There have been recent studies that have shown that many students in universities are able to pass a test using learnt knowledge, however if they are given a task that is unusual or requires some creative thinking, they struggle. Here at Denmead Junior School, we noticed that children were struggling to think about tasks independently. They often did not know where to start with a task and all too easily gave up.

As a school, we looked at different studies that had been done in this area and discovered that our children need to be taught **how** to think, using questioning and modelling approach. By teaching our children how to think, we were looking for an outcome that lead to an increase in resilience, independence and creative thinking.



## How did Denmead Junior School implement a metacognition approach?

We introduced a metacognition approach in September 2018. The initiative was started in one classroom to begin with. The class teacher and teaching assistant used the questioning and modelling approach with the children, with the outcomes closely monitored and the impact on the children's learning observed.

During the academic year, other teachers started experimenting with the approach and started to see impact on their own classrooms. Research continued by the teaching staff and we looked at incorporating the learning skills that the school had adopted and the growth mindset approach, which was already embedded throughout the school.

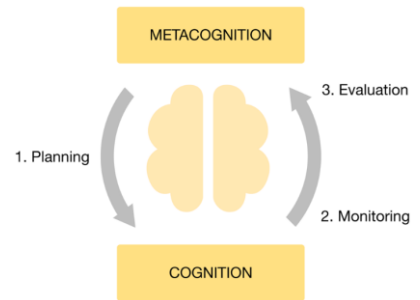
At the start of September 2019, with some new staff at the school, the metacognition approach was taken whole school. The staff continue to develop their understanding of the teaching method and adapt it to their style of teaching.

## What has been the impact of the metacognition approach so far?

In our school, we are starting to see more independent learning and children willing to have a go. They are become more curious in their learning which in turn, means they are more engaged in class. There is still work to do but so far, the outcomes have been very positive.

## What is the question and modelling approach?

In Denmead Junior School, we have adopted a questioning and modelling approach to metacognition. Children need to be taught how to plan their approach to a task, they need to monitor how the task is progressing and they then need to learn to evaluate the process and identify where improvements could be made next time.



## Questioning

We have a set of different questions that the children are encouraged to use when completing a task. These questions are designed to encourage the children to think through a problem and make links to their previous learning. By answering children's questions with a question, you put the learning back onto the child and encourage them to think for themselves. The more a child becomes confident with answering their own questions, the stronger their independent learning becomes.

## Modelling

By modelling your own thinking as an adult, you are demonstrating to children the thinking process. The more a child sees positive thinking role models, the more likely they are to copy and learn the techniques for themselves. Teachers in school, model their thinking during inputs and during discussions with children, acting as a thinking role model.

## How can I use metacognition at home with my children?

As a parent, the use of metacognition could also have a positive effect at home. By using the questioning and modelling approach, you would be supporting their learning at school and support them in other aspects of their lives.

- Use metacognition questioning when completing tasks.
- Model your own thinking on a subject.
- Encourage a growth mindset- we can all improve with practise.
- Encourage discussion where the children express their ideas on a subject.
- Encourage children to investigate and enquire.
- Celebrate mistakes - they are learning.
- Stand back and let the children try independently before helping.

## Further research

<https://educationendowmentfoundation.org.uk/tools/guidance-reports/metacognition-and-self-regulated-learning/>

<https://thirdspacelearning.com/blog/7-steps-eef-metacognition-primary-classroom-maths/>

*Why not look at our other documents on the website now:  
Metacognition questions & Learning powers*