Metacognition – A Guide for Parents

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What is it?

Cognition. It's a fancy word that you've undoubtedly heard but perhaps aren't too sure on a definition of? In short, cognition is the knowledge that we have and the skills which we possess that allow us to complete tasks and get through day-to-day challenges in life. This could be anything from how we wash the dishes to answering a long form History question, and everything in between.

Metacognition builds upon this, and is the idea of how we plan, monitor and evaluate our cognition. In effect, we begin to think about our thinking – we're going to a deeper level. But, what do I mean by this? Fortunately, metacognition is broadly understood in three parts: planning; monitoring; evaluation.

Planning

This is where we would consider the different ways in which we could complete a task. We consider the methods that we have available to us, the amount of time we have, the task criteria, and other factors. At home, this may be considering the way in which we make a cup of tea (for example, tea bag, then hot water, then milk, or tea bag with milk, and then hot water), whilst at school it may be considering how best to solve an equation (should I, or should I not expand those brackets?).

Monitoring

This stage of the metacognitive process is where we consider if things are going to plan. We may consider if the method we chose is working well so far, how much time we have left and any extra support that we could need to finish off the task. At home, this would be considering if you've left the tea brew long enough, whilst at school, this would be considering if you've included enough dates and facts or if you should try to add more in your next few paragraphs.

Evaluation

The evaluation stage of metacognition is where we consider if our cognitive actions have been successful. We would consider if we have achieved the task success criteria, review what went well and what didn't, and ponder what we would do the same, and what we would do differently, next time. At home, this would be tasting the tea to see if we liked it, and considering what needed to change next time, whilst at school this could be getting some feedback in a language lesson so that we know which words we are pronouncing correctly and which we need to work on.

An overall definition which could help, is this: [Metacognition is] the little voice inside your head that constantly evaluates and informs your decisions.

Why does it matter?

This all seems like quite technical stuff, but it really is quite important. The Education Endowment Foundation (EEF), a huge educational body who research a range of different teaching approaches, has found that the *most* beneficial thing that we can do in the classroom, and the *most* important skills that we can develop in our young people, are in fact, metacognition!

This conclusion has come off the back of evaluating over 1600 academic research papers, which have explored how metacognition has been developed in a range of different individuals in a range of different settings. And all of these papers draw one conclusion – that it is hugely powerful for every single individual. This means, that regardless of an individual's background (demographics, prior attainment and so forth), improved metacognitive skills can lead to improved academic outcomes.

In fact, the EEF concluded that improved metacognitive skills in students could lead to an 8-month uplift in attainment. 8 months isn't far off a whole school year – so we really shouldn't be turning up our nose at the potential massive gains that our students could make through improving these skills.

How can I support at home?

It is hopefully at this point in the guide where you are clear on what metacognition is, and sold on its importance. That means you now want to know what *you* can do at home to develop metacognition in your child. Fortunately, there are a range of different strategies that you can use at home in order to support metacognitive development. And magically, most require very little extra work, and will simply be asking questions about, and supporting with, school work, in a slightly different way. When I speak to teachers about metacognition, I talk about how they just need to tweak their practice, not start from scratch. It is exactly the same at home – tweaking what you do rather than re-inventing the wheel!

Plan, Monitor, Evaluate

As highlighted at the start of this document, metacognition is, in effect, the process of planning, monitoring and evaluation. Can you introduce this language into the household? Can you ask these questions of your child when they are doing their school work?

How are you planning for that task?

How do you know that is what you are supposed to do?

Do you know if you were successful?

What are you going to do the same next time? What are you going to do differently?

Where you can, use the words 'planning', 'monitoring' and 'evaluation' so that they become commonplace in the home. The more natural they become to talk about, the more naturally embedded they will become in your child's work.

Knowledge of Task, Self and Strategies

One area of metacognition that hasn't been mentioned so far is an individual's knowledge of task, knowledge of self and knowledge of strategies. This is another key part of the theory, as these three stages make up a very effective way to plan for a task.

What do these three areas mean? Knowledge of task is your comprehension of what you need to do. How many paragraphs? How many points? What should the final product look like? Knowledge of self is an understanding of what relevant knowledge you have to answer a question. For example, you might know a lot about the Second World War generally, but your knowledge of events of 1942, for example, could be weak. Knowledge of strategies is an understanding of the different methods that you can take to complete a task.

By working through these areas, an individual is going to plan better for a task, and by planning better for a task, the resulting product or answer will be much improved.

As above, the best way you can support your child is by asking them questions in relation to these areas. These questions could include: what exactly do you need to do, and how do you know that? What information do you know that will help you? Is there any other information that you need? How could you go about doing it? Is there a better way?

Once again, making this language commonplace will ensure that these ideas become second nature to your child, supporting their metacognitive development.

Modelling Explicit Justifications

One of the top tips I give to teachers is to get them to justify the choices that they make when they are modelling new ideas in the classroom. However, this is also possible at home. If you are helping your child with their work, when you make choices, justify them. Why did you focus in on a key word? Why did you choose one strategy over the other? How did you know that you needed to start a new line, or make a further point in order to get all of the marks?

You can also question your child about the choices that they are making, ensuring that they are actually thinking deeply about what it is that they are doing, rather than simply 'going through the motions' with getting their work done.

Strategy Comparison

One of the biggest benefits of metacognition is how it can improve an individual's problem-solving abilities. One of the hardest things about problem solving is knowing what strategies to use, and when. If we are more confident using a range of different strategies, and if we know when it is better to use one over another, then we are far more flexible in our approaches, and so we become better at problem-solving!

Therefore, when you are doing different tasks with your child, explore different ways in which you can do the same thing, and then consider which the most effective approach is. It could be things in the kitchen, the order in which we clean the house or how we change our bed sheets. You can also question your child about the strategy that they are using and have a discussion about the strengths and weaknesses of the approach that they are taking.

Connections, Connections, Connections

One of the best ways to strengthen your own (cognitive) understanding is through connections. This idea of developing schemata – in effect, seeing how things link together – is a brilliant way to strengthen our metacognitive thinking.

Here, focus would be placed on understanding how different tasks link together, and considering how the process to do one task could be the same or different when approaching a different task. The more time we spend thinking about how different concepts link together, the better!

Key Word Quizzing

One of the biggest barriers to improved student learning is the ability to comprehend new information and tasks due to the vocabulary that is used. As noted above, if students struggle with their comprehension of a task, then they will struggle to complete a task effectively.

One thing that you can do to address this is to make a bank of key words. These could be subject specific key words (such as ‘denominator’) or question specific key words (such as ‘analyse’). These key words, and their definitions, can then be placed on to flashcards to support learning them.

Knowing these words in and of themselves will not guarantee better outcomes, but it will improve task comprehension, which in turn should lead to improved outcomes!

Checklists

This is a technique that supports both a child’s planning and monitoring skills. The idea here is that you would sit down to create a checklist of all of the key things which need to go into an answer – such as key dates, facts, numbers and quotes. This ensures fantastic planning, but it also creates a list where items can be ticked off one-by-one after they have been included within the answer. This provides the perfect monitoring checklist to ensure that everything that should be in an answer, is.

Do It Again, Differently

This might be a hard sell, but this idea involves doing work twice… The first time, the child would get to do the work however they wanted, using a strategy that they are happy and comfortable using. They would then have to do it a second time, this time using a different strategy. There are two big benefits of this. Firstly, the child becomes confident approaching tasks in more than one way, becoming a more flexible learner and hence better at problem solving. Secondly, by completing the same task twice with two different strategies, it makes it far easier to identify the relative strengths and weaknesses of those different strategies. Helpful!

Talk

This final strategy isn't strictly metacognitive, but it is very helpful. Talk. Talk to your child about what it is they are learning. What they have, and have not enjoyed, and why. What have they found difficult? What do they need support with? All of these discussion areas ensure consideration of the learning process, which in turn can support metacognitive development.