

What does metacognition look like in the classroom?

What is metacognition and why is it important?

Metacognition is the ability to monitor, adjust and reflect on our own learning. This is a process that most of us go through every day without even noticing. When we weigh up strategies to tackle a problem or reflect on why we did something metacognition is at work.

For children in the classroom, learning metacognitive strategies allows them to approach a potentially stress inducing experience like a maths exam or an essay with a proactive and positive mindset. Instead of thinking “I can’t write a 500-word essay!” students who are aware of how they learn can offer up strategies and ask helpful questions:

- “What is it about this essay that is stressing me out?”
- “What have I done in the past to write an essay?”
- “To help me get started I can brainstorm everything I know about the topic.”
- “I don’t get so overwhelmed by spelling when I type on the computer.”
- “Writing is easier when I take short brain breaks.”

For students with learning difficulties who deal with more setbacks than most children it’s even more important that we teach them to be aware of their thoughts, manage frustration and find better ways to learn. It’s never too late to start teaching metacognitive strategies in your classroom.



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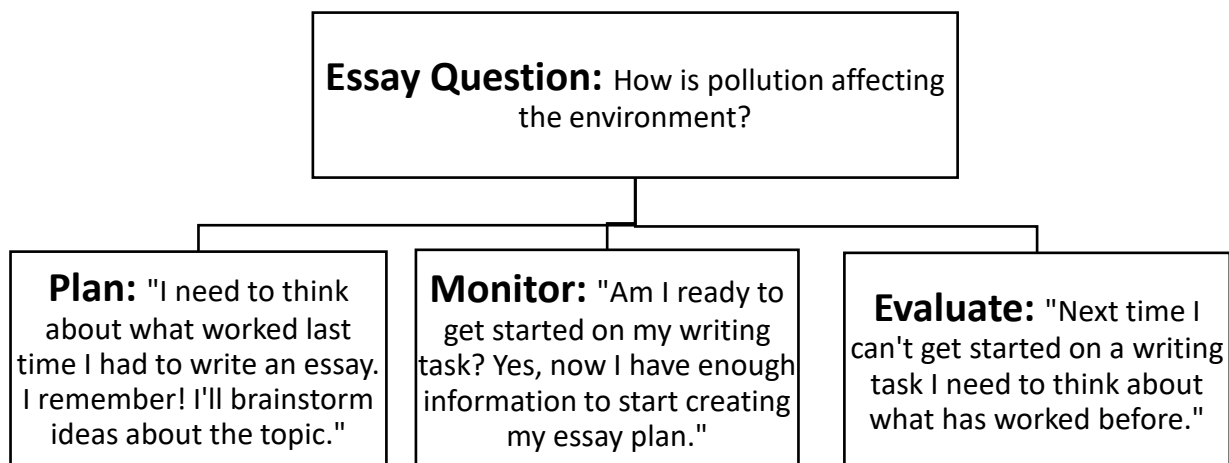
Metacognitive Strategies for the Classroom

1. **Prior knowledge** – ask students questions to get them thinking about what they do or don't know about the topic, how it might relate to past experiences or misconceptions they might have. If your students are about to start a unit on air pollution you might ask some questions a week before you begin.

1. What is air pollution?
2. What impact does it have on food, crops and forests?
3. Is it a new problem?
4. Has any country solved this problem?

Tip: Use a fun interactive online platform like [Kahoot](#) to assess prior knowledge, review content and explore student opinions!

2. **Plan, monitor and evaluate** - model to students how to plan, monitor and evaluate their learning. Here's what a metacognitive thought process might look like to tackle an essay.



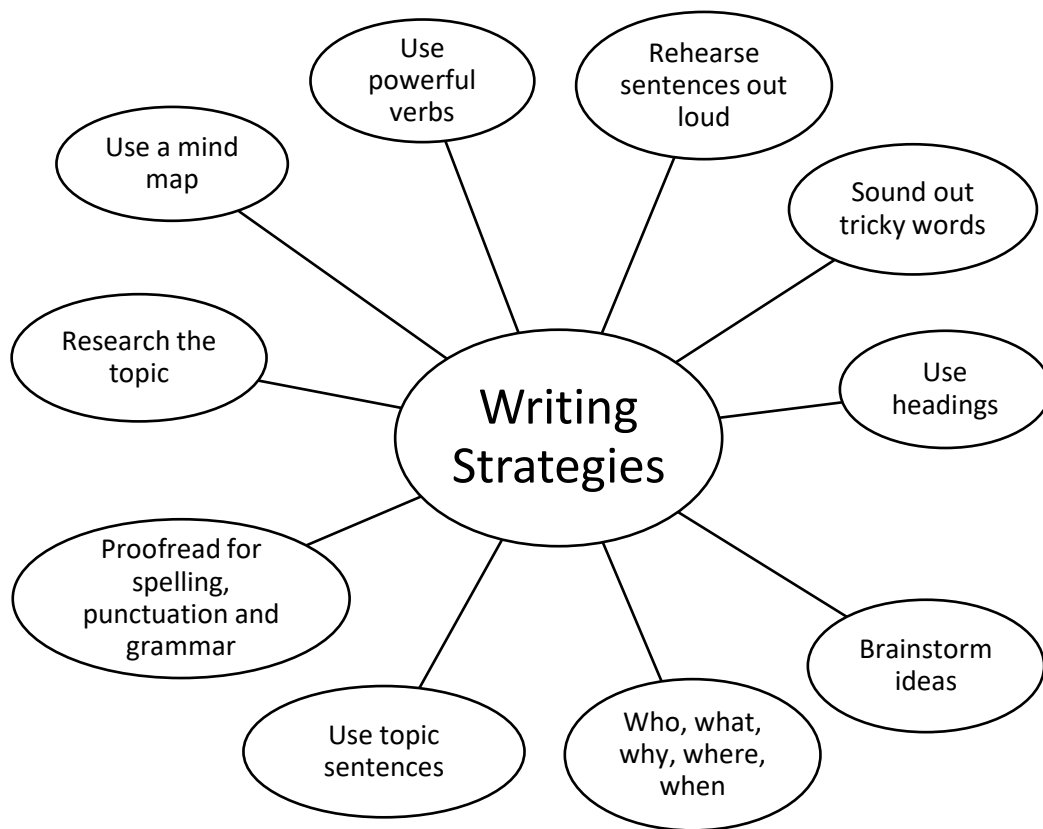
3. **Thinking out loud** – as the teacher you can model metacognition by thinking out loud any time you approach a problem, try to understand a new concept or reflect on your learning.

Activity: Ask your students to work in pairs. Take it turns thinking out loud and verbalising how they would approach a task like the essay question above. One student should write down the strategies being presented and then partners swap. Students can give feedback and evaluate each other's ideas. Come back as a whole group and discuss what was learned.

4. **Mind maps** – mind maps allow students to verbalise-visualise their ideas and see the bigger picture. As a metacognitive strategy it allows students to organise, extend and evaluate ideas. A mind map could be used to delve into a class topic like 'Air Pollution' or it could be used to explore metacognitive strategies to approach a task.



Activity: Use a mind map to investigate writing strategies as a whole group and discuss which are the best ones for an essay.



5. **Lesson Wrappers** – encourage students to reflect on their learning at the beginning and end of a class with a lesson wrapper.

Activity: At the beginning of a lesson tell students that you will be asking them for one key idea they’ve learned and one idea they didn’t understand or would like to know more about at the end of the lesson. 10 minutes before the end of class ask each student to write down their ideas. The teacher should also complete this activity. At the end of the lesson discuss the key ideas and the ideas that need more clarification.

6. **Written Reflection** - following an assignment or writing activity ask students to reflect on the steps that they followed to complete the task. What was effective? What didn’t work? What could be improved on. A meaningful way to incorporate this practice into your classroom routine is through a learning journal.

Further Reading

Read through excellent examples from prep to university teachers using metacognition to improve learning outcomes for their students in [“The Boss of My Brain”](#). Explore how a third grade teacher incorporated metacognitive strategies into a reading lesson [“Instruction of Metacognitive Strategies Enhances Reading Comprehension and Vocabulary Achievement of Third-Grade Students”](#)

