

Metacognition

with Professor Mariëtte van Loon and the Metacognitive Development Research Group

Activity

Use the following questions to reimagine one of your lesson plans to help you assess your students' metacognitive abilities, provide opportunities for them to practice their monitoring and control skills, and create more opportunities for feedback.

1. How can you regularly integrate self-scoring into your lessons to gain direct insight into how well your students distinguish their errors from correct answers?
2. Low-performing students are statistically offered fewer opportunities to practice self-regulated learning. How can you adjust your upcoming lesson plans to ensure struggling students get equal practice?
3. How could you incorporate a short delay before asking students to identify what they know well and what they need to revisit, rather than asking them immediately after studying?
4. What specific 'generation tasks' can you introduce to help your students explicitly visualise how well they understand complex topics?
5. The team's work highlights the benefit of giving students control over how long they spend on an item. In what ways can you adjust your classroom task to give students more autonomy over how they approach learning tasks?
6. When working with older students, how can you shift your feedback from giving direct answers to asking reflective questions that prompt them to critique their own strategies?

Reflection questions

1. Some research suggests that metacognitive skills are at least as important as intelligence when it comes to academic achievement. To what extent does this finding surprise you, and why?
2. To what extent are you aware of your students' metacognitive abilities? What steps could you take to ensure that you have an accurate understanding of which students might need more support in this area?
3. Since research shows that teachers may overestimate metacognition based on high grades or class participation, what misinterpretations might you be making about your own students' metacognitive abilities?
4. Research suggests that teachers tend to underestimate the metacognitive skills of boys and students from minority backgrounds. What objective steps can you take to ensure your evaluations remain unbiased?
5. Mariëtte and her team conduct their studies in school contexts rather than in laboratory environments. To what extent do you think this improves the relevance of their research, and why?
6. Mariëtte points out that she is a cognitive psychologist and not an expert in school culture and classroom management. What challenges might arise when trying to apply her advice on individual metacognition in a classroom context that also requires attention to group management and curriculum goals?

More resources

- You can learn more about the team's research here: psychology.uzh.ch/en/areas/dev and psychologie.unibas.ch/en/faculty/departments/human-development
- The Education Endowment Foundation has produced a guidance report on metacognition and self-regulated learning containing recommendations for schools and teachers: educationendowmentfoundation.org.uk/education-evidence/guidance-reports/metacognition