

## Teaching Tip: Metacognition: Thinking about Learning

Metacognition is often explained as thinking about our thinking and thinking about our learning. The goal of metacognitive strategies in education is to understand the process of that thinking and how we go about learning. This kind of activity can be helpful for our students because it can help them focus on more successful learning and study strategies. Metacognitive thinking asks students to reflect on the process they go through when trying to learn something and to make changes where their study habits or techniques aren't very successful while validating and transferring those that are.



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### What is Metacognition?

Metacognition is a self-reflective process where we ask ourselves questions about how we went about learning something, the process we went through in finding a solution to a problem or question, or the techniques we used to help us remember information. As a teacher, our role in metacognition is to encourage students to take the time to think about how they understood or processed something so that they can link this to how their thinking process works. You can then guide them to consciously choose the best strategies for learning, problem solving, and remembering information.

### Metacognitive activities

While some of the stronger students may engage in self-reflective practices with their learning, asking themselves questions about what they know, what they need to learn, and whether or not they understood a reading, many students do not. Some of the following strategies may be useful to encourage **all** students to have a plan with regard to approaching learning and studying in your discipline.

- The [3-2-1 bridge activity](#) has students acknowledge what they do and do not know, and then offers them the opportunity to reflect on how that knowledge changes after a lesson or activity.
- The Harvard Graduate School of Education's Project Zero has a [Visible Thinking](#) web page that offers ideas and resources that help students identify and make their thinking processes visible.
- The Learning Centre at Vanier has a wealth of Tipsheets written specifically for the Vanier student population with regard to [studying, listening and note-taking](#), and [exams](#). With your encouragement and guidance, analyzing these Tipsheets with students in class or during office hours in preparing for or debriefing after an exam can help students to think metacognitively.

### Model your Metacognition

A method of practicing what you preach would be to share with your students how you approach problem solving in your discipline or how you remember important information. Acknowledging the importance of metacognition as a content expert allows you to model good practice for your students. Share step-by-step approaches, how you analyze data, different mnemonics, or study skills and tips you gained as a student and perhaps still use as a teacher.

For more information about student thinking and learning, please [contact us at the PDO!](#)