

Who Cares about Metacognition?

“You can observe a lot by just watching” --Yogi Berra

Metacognition is conscious awareness of our own thinking. When we watch our own thinking, we note how we plan, monitor, and evaluate our own learning. Those of us with a low tolerance for jargon may be tempted to stop reading right now, but an important NIH study suggests that considering metacognition is worth our time. *How Learning Works*, a massive synthesis of important work in the sciences of learning, points to metacognitive teaching approaches as one of the three most effective ways to increase learning. Metacognitive teaching strategies share an important similarity: they prompt students to reflect on *how* they are learning, as well as *what* they are learning. Let’s look at three:

- **Add a “wrap”:** A wrap is a short reflection attached to an existing assignment. For instance, after writing a paper students might attach a paragraph describing the challenges of the task and how well they addressed them. Or after receiving a graded exam, students might complete a form that helps them to connect their study strategies with their performance and to consider what changes might be in order.
- **Ask about the muddiest point:** At the end of class, students briefly reflect on what has been covered and write down what still seems unclear, the day’s muddiest point. The instructor collects these short, anonymous statements and revisits them at the start of the next class by clearing up a common misconception or inviting the class to consider what is so challenging about a specific topic.
- **Do a pre- and post-assessment:** Make a list of five true/false statements that address the session’s important concepts. At the start of class, students mark these true or false. At the end of class, they revisit the statements, possibly adjusting their answers. Ask students to share with a partner one place where their thinking changed and what prompted that change.

To make metacognitive strategies work, two things are worth keeping in mind. By the time students get to us, many have internalized the idea that the only important thing about learning is getting the right answer. For that reason, it’s useful to be explicit—and probably repeatedly explicit--about why we are asking them to reflect on how their learning process is going. In addition, many students’ greatest fear about school is looking foolish because they have made a mistake. Since metacognitive approaches demand that we own our errors and false starts, establishing a safe classroom climate is crucial.

Here are three on-line sources with good ideas for metacognitive teaching approaches.

Chick, N. (2017). “Metacognition,” Retrieved from <https://cft.vanderbilt.edu/guides-sub-pages/metacognition/>

Freeman, S. M. (2014). “Exam Wrappers.” Retrieved from <https://teachingcommons.stanford.edu/teaching-talk/exam-wrappers>

Jaschik, S. (2011). “Can Students Learn to Learn?” Retrieved from https://www.insidehighered.com/news/2011/01/31/colleges_try_to_use_metacognition_to_improve_student_learning