

STUDENT REFLECTION

PLANNING INSTRUCTION & LEARNING ACTIVITIES



WHAT IS IT?



Generally, metacognition is “thinking about thinking.” Complex and multi-dimensional, scholars posit that metacognition is comprised of two main components: the knowledge and regulation of cognition. Having awareness of how one learns, one’s strengths and deficits, and the benefits of situational learning strategies contribute to “knowledge” about cognition. While regulation of cognition consists of actively engaging in one’s own learning process through planning, monitoring, reflecting, and strategizing. This is a type of intentional learning that interacts with active inquiry (Metzger et al, 2018)¹.

RESEARCH...



Studies have identified student metacognition as a significant mechanism for producing positive learning outcomes (Millis, 2016). Self-directed learners can evaluate their knowledge and skill in the context of a learning task, prescribe a path to accomplish it, and monitor and adjust as needed along the way (Ambrose et al., 2010).

DATA ...



18% of UCD students report asking insightful questions during class

21% report that they have brought up ideas or concepts from different courses during class discussions (UCUES, 2018)

TEACHING STRATEGIES...



- **Ask questions** about class sessions, learning tasks, or exams **to promote student metacognition** (e.g., *how did the ideas of today’s class session relate to previous class sessions?*).
- **Demonstrate** for students **how you**, as the expert, **think procedurally** – solving a problem, engage in a reading of text, or organize and study for an exam.
- After modeling how to self-reflect for students, **provide them with opportunities to practice** the metacognition and to receive meaningful feedback.
- **End class sessions with quick reflective activities** such as *The Minute Paper* (e.g., *what is the most important thing you learned today?*) or *The Muddiest Point* (e.g., *what was the most confusing about the material covered in class today?*).
- **Integrate metacognitive exercise** into already established instructional activities and assessments (e.g., exam wrappers, learning logs, reflective journals).

STUDENTS SAY...



“When I am able to compare my responses with my peers in class, I tend to learn more.”

“When I am asked questions that make me explain my reasoning or justify my answer, I learn the concepts better.”

REFLECTION...



- *How can you incorporate student reflection, self-assessment, and peer-review activities?*
- *How do you encourage students to set their own learning goals, develop personal plans to achieve them, and reflect on these goals to monitor progress?*
- *How can you use students’ reflections to inform how you plan instruction and design learning activities?*

¹List of all references in the complete JITT Guide.

