



REFLECTING AT EVERY STAGE OF THE PROCESS

OVERVIEW

Prompting students to reflect on their thinking and learning helps both teachers and students better understand how they are processing information, what is resonating, what is clear/unclear, and how they are using both critical and creative thinking in their process. Oftentimes these thinking processes are so embedded in the assignment or project output that they can be difficult to isolate and evaluate. Reflection is a critical method through which you “see” what students are thinking.

REFLECTION ACTIVITIES

Reflecting on Performance (Immediate)

Reflective prompts can be incorporated into every assignment or discussion as a way to get students to consider how their thinking affected the work and output of the assignment.

Reflective prompts:

- Is your argument clear? How could it be made more clear?
- How did this exercise broaden your understanding of this idea or concept?
- What information or counter-perspectives might still be missing from your examination?
- Is your argument logical? Why or why not?
- What contribution does your argument make to the larger world or field? What might others gain from this examination?
- How might you incorporate ideas from this assignment/project/procedure into other assignments, work, or classes?

Metacognitive Reflection (Ongoing)

Metacognitive reflection asks students to consider the way that they think, make judgements, draw conclusions, and acknowledge their assumptions and biases throughout the learning process. It asks them to explicitly consider their own higher-order thinking skills and evaluate how that helps or hinders their learning.

Reflective prompts:

- How much did you draw on previous knowledge for this assignment/class/project? Why?
- How did your assumptions and biases affect your approach to this assignment? Do you think that kept you from evaluating ideas fairly? Why or why not?
- Which stage of this assignment made you the most uncomfortable? Why? How might you overcome that discomfort in the future?
- In what ways has your ability to explain this idea/concept/process changed?

READINGS & RESOURCES

Kaplan, Matthew and Silver, Naomi. *Using Reflection and Metacognition to Improve Student Learning: Across the Disciplines, Across the Academy*. Stylus Publishing, 2013.

Ritchhart, Ron, Church, Mark, Morrison, Karen. *Making Thinking Visible: How to Promote Engagement, Understanding, and Independence for All Learners*. Jossey-Bass, 2011.

See Also: **Writing to Think** at <https://think.dasa.ncsu.edu>

Journaling (Semester-Long, Comprehensive)

Often, assignments and projects are demonstrations of students' knowledge. Writing to think—and getting students to include writing in their process early on—can help them think through problems and solutions. It can also be a low-stakes way for students to get comfortable with risk taking. Have students keep a journal (digital or physical) throughout the semester. Give prompts that connect what they are learning in the classroom with experiences they might have had in their everyday life. It's advantageous to include smaller prompts as well as regular reflections with every project and/or test.

Reflective prompts:

- Write about the process that you went through to get to the final solution.
- Log when you ran into a roadblock and what you did to overcome it.
- Write about your assumptions and how new perspectives changed your viewpoint.