*How Learning Works: Self-Directed Learning and Metacognition*

Teaching Recommendations

**PRIMARY ARGUMENT:** Students need instructors’ support in developing metacognitive skills because students tend not to develop and not to apply metacognitive skills sufficiently and effectively without external assistance.

**Recommended Strategies:**

1. Be more explicit than you may think is necessary.
2. Tell students what you do *not* want.
3. Check students’ understanding of the task.
4. Provide performance criteria with the assignment.
5. Give early, performance-based assessments.
7. Have students implement a plan that you provide.
8. Have students create their own plan.
9. Make planning the central goal of the assignment.
11. Have students do guided self-assessments.
12. Require students to reflect on annotate their own work.
13. Use peer review-reader response.
14. Provide activities that require students to reflect on their performances.
15. Prompt students to analyze the effectiveness of their study skills.
17. Create assignments that focus on strategizing rather than implementation.
18. Address students’ beliefs about learning directly.
20. Help students set realistic expectations.

**Above all, MODEL and SCAFFOLD throughout teaching!**

And note that *instructors often falsely estimate their students’ metacognitive capacities, thus missing crucial opportunities to develop these capacities.*

The above is quoted and summarized from Ambrose et al. (2010). *How Learning Works*, ch. 7, 188-216. (summaries by Gina Rae Foster, 2014)