

Reflection



Engage Academically. Learn Exponentially.
Showcase Yourself.

Why Reflection?

“A growing number of cognitive researchers and educational theorists have studied the reflective process and concluded that it is key to enriched student learning.”

In *How People Learn: Brain, Mind, Experience and School*, Bransford et al. identify and examine “research that demonstrated the benefits of reflection for student learning in topics as diverse as **physics, writing and mathematics**, as well as for increasing the degree to which students **transfer their learning across disciplines and semesters**.”

cited in Eynon, Gambino, & Torok, 2014

Research Based Strategies for Academic Success and Personal Development

Four essential principles of academic/college success:

1. Active involvement
2. Utilization of campus resources
3. Social interaction/collaboration
4. **Self-reflection**—self-assessment, self-monitoring; reflecting on feedback, reflecting on one's future

From: Thriving in College & Beyond: Research Based Strategies for Academic Success and Personal Development

How Learning Works: 7 Research-Based Principles for Smart Teaching

Give students opportunity to reflect and self-assess (ch. 3, ch. 7)

Students have trouble “accurately assessing their own learning and performance, and they fail to adapt their approaches to the current situation.”

Cycle of Self Directed Learning

- Assess
- Evaluate
- Plan
- Apply
- Reflect

Students

- tend to generate inappropriate assessments and plans,
- fail to even consider these steps, and
- need significant practice at task assessment and planning.

From: How Learning Works: 7 Research-Based Principles for Smart Teaching, p. 193

Cycle of Self Directed Learning

Assess task at hand

- Check understanding of the task through reflection

Evaluate their own knowledge and skills, identifying strengths and weaknesses

- Practice exams and rough drafts with reflection

Plan their approach in a way that accounts for the current situation

- Provide a model for effective planning
- Ask them to create their own plan
- Make planning a central goal of the assignment

http://learningandtheadolescentmind.org/resources_02_bucket.html

Cycle of Self Directed Learning

Apply various strategies to enact their plan, monitor progress along way

- Require students to reflect on and annotate their own work (process logs, answer reflection questions, etc.)
- Use peer review/reader response with questions or rubric to follow

Reflect on the degree to which their current approach is working so that they can adjust and restart

http://learningandtheadolescentmind.org/worksheets/Thinking_about_Thinking_Self_Reflection_Tool.pdf

The Minute Paper

Assess understanding, provide instructional feedback, promote student reflection

- What questions remain unanswered about yesterday's topic? (beginning of class)
- What question remains unanswered about today's topic? (end of class)
- What was the most useful idea discussed in today's class?
- What relationship did you see between today's topic and what you are learning or have learned in other courses? (integration)
- How will I use this information in the future? (transfer)

Reflection Questions

Brainstorming before class: What questions about today's reading topic do I hope will be covered today?

Exam Questions: Based on the material covered today what is a likely test question for the exam?

Growth mindset: How can I use my instructor's feedback to improve for next time? How can I use this error/mistake to grow? What will I do differently next time?

Participation questions: What did I contribute to class today/this week? Assess your performance as a participant in class? How can I improve my participation in class?

Preparation questions: How did I prepare for this exam/paper/assignment? Was it successful? What will I do differently next time? What skills do you need to work on?

Integration questions: Why is this knowledge/skill important to my future academics, profession, or personal development? How can I use or apply this content? How can I use this in the future? What else have I learned that is similar? What examples can I think of? What knowledge/skills did I gain or demonstrate? (assign value to their work)

Resources

- Problem-solving tool for thinking about thinking and

Self-reflection tool

http://learningandtheadolescentmind.org/resources_02_bucket.html

- Quick reflection and feedback prompts (p. 7, 8, 11)

<http://assessmentinstitute.iupui.edu/overview/institute-files/2010-institute/tuesday-2010/angelo9K.pdf>

- Examples of reflection prompts in writing classes (p. 5), teaching (10)

http://c2l.mcnrc.org/wp-content/uploads/sites/8/2014/01/Reflective_Pedagogy.pdf

Questions?



MT Engage Integrative Thinking and Reflection



References

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