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Self-Directed Learning
How Do Students Become Self-Directed Learners?
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By the time we're finished, you should be able to do 3 things:

- To consider the idea of **self-directed learning**.
- To help anyone develop **metacognitive** learning strategies.
- To develop and implement the **strategies** that encourage self-directed learning.



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What is Metacognition?

- Awareness or analysis of one's own learning or thinking processes
 - Being aware of what you know and don't know.
 - Understanding what you will need to know for a certain task.
 - Having an idea of how to use your current skills to learn what you don't know.



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▪ Metacognitive Inventory

- *Think about your own metacognitive processes. What kinds of strategies do you use to monitor and access your own learning and practice?*
- *Of the declarative, procedural, or conditional knowledge which are you more proficient? more inefficient?*
- *Of planning, information management, monitoring, debugging, or evaluation strategies which are you more proficient? more inefficient?*



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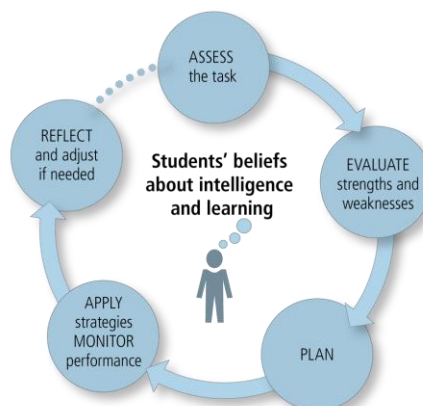
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How can we help students follow through on each of the elements of metacognition?

To become a self-directed learner one must:

- *Assess the demands of the task;*
- *Evaluate one's own knowledge and skills;*
- *Plan an approach;*
- *Monitor progress;*
- *Adjust strategically.*

Self Directed Learning Cycle



How Learning Works, Ambrose, et. al., 2010

- **Assessing the task [to be done] at hand:**

- Be explicit about the task and what is required – do not assume
- Examples of good AND bad work.
 - Clarity of the differences between excellent and poor work leads to more excellence.
- Check understanding.
 - Ask for an explanation of the perceived task.
- Explicit criteria – rubrics
 - The more explicit the criteria the better they will be achieved.

- **How to help students evaluate their own strengths and weaknesses.**

- Practice
 - Timely feedback with explicit performance based assessments.
- Formative Assessments
 - Identify particular skills that are targeted in a particular task.
 - Allow the individual to correct and enhance their weaknesses.
- Complete feedback.
 - Be as explicit as possible in giving feedback
- Opportunities for Self-Assessment [in context]
 - Self-reflection in a low stakes setting is an important skill for any professional to cultivate.

- **Planning**

- Model appropriate planning.
 - Let the students see how you operate in your discipline.
 - Focus on how to plan as well as how to make changes if necessary.
- Allow students to create their own plan
 - Give extensive feedback
 - Require self-reflection.
- Planning should always be a central element of the activity.

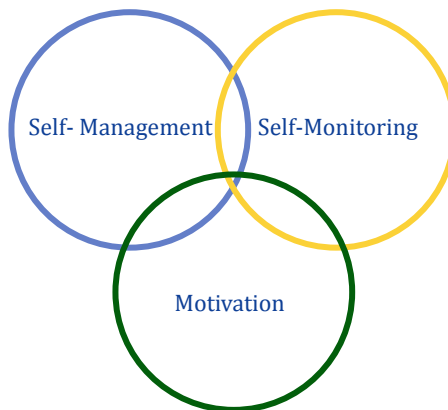
- **Applying Strategies and Monitoring Performance**

- Provide simple heuristics for self - correction.
- Require self-assessments
- Reflection and annotation of work
- Peer Review

▪ Reflect and Adjust

- Require formal analysis for every project and activity.
- Use prompts for analysis of learning.
 - What type of error occurred
 - How did they come to their conclusion (e.g., what research did they use; what inventory did they apply etc.)
 - What will they do differently
- Demonstrate multiple approaches to conceptualize a problem or task.
- Focus on strategizing rather than just outcome.

Self-management relates to the ways we control the external factors that affect our learning, such as goal setting and management of relevant resources (Garrison, 1997).



Self-monitoring is a commonly utilized self-management approach in which one systematically observes and records one's own behavior (Reid, Trout, & Schartz, 2005). It is a tool for self-improvement.

The word **motivation** comes from the Latin verb "movere," to move. In education research, motivation is defined as "the process whereby goal-directed activity is instigated and sustained" (Pintrich & Shunk, 2002, p. 5).

- **For each of the following cases, consider the following questions:**
 - To better understand this situation, is there further information you need?
 - How does the student’s behavior reflect his/her:
 - self-monitoring;
 - self-management;
 - expectancy for success and value of their learning?
 - Are there steps you would take next?
 - What instructional techniques can you use to influence their self-direction?

Case A

The “A” Student

I was exhausted from reading and grading twenty-five papers over the weekend, but was glad to be able to hand the papers back so quickly. The paper was supposed to evaluate emergent research for application in a professional setting. After I turned back the assignment, one of the interns approached me and insisted she needed to talk with me “immediately” about her grade. Her work was a typical first paper of this kind. Rather than evaluating the evidence she presented in the paper, she simply summarized several research articles in her topic area. Her paper lacked a clearly articulated argument, and there was only weak evidence to support what I could infer was her main point. She explained that she was a “gifted” writer who received “A”s on most of her collegiate writing, and that her mother, a high school English teacher, had read the paper and thought it was excellent. The intern admitted that she had started this assignment the night before it was due, but insisted that she worked best under pressure, “That’s just how my creative juices flow”.

Case #B**The Hamster Wheel**

On his second case-study assignment, John only scored a 70%. It was mystifying because he attended every class and meeting, sitting attentively, and taking copious notes. He pored over the materials, documentation and professional guidelines he needed to apply in a professional setting. His description and diagnosis of the problem and symptom statements were poorly justified and constructed. His first case study was not very good either, though he wasn't alone in that regard. By this time however, he should have learned what to expect and how to present his case in writing. When I asked John what happened he, too, seemed perplexed. He said he had studied for weeks, showing me the glowing yellow pages where he highlighted relevant content. He used notecards for prompts as he wrote his case summary. He even memorized various terms by using flashcards. When I asked where he learned this approach, he said it had been working for him for years, as he was preparing for traditional tests.



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- **Promoting Metacognition in your students.**
 - Address beliefs about continuous learning directly.
 - Practice and discipline always helps with learning
 - Broaden their understanding about learning.
 - Learning operates on multiple levels.
 - Set realistic expectations
 - Skills take time to develop.
 - Mistakes are learning opportunities if handled appropriately.
 - Model your metacognitive processes
 - Scaffold metacognitive processes.



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All materials and the recording may be found at:

<http://sites.psu.edu/schreyerluncheons/>



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