What is Self-Regulation in a Learning Context?

By the end of this lesson, you will be able to: define self-regulation and metacognition, name the key elements related to self-regulation and metacognition in a learning environment, recognize the importance of self-regulation and metacognition in academic and professional contexts, engage in metacognition and self-regulation

Imagine a student is preparing for a midterm with their friend. They're fairly certain they know the content that's been covered in class so far— they've prepared the whole weekend. Their study partner asks them a question about a theory that was discussed early on in the course, one that they only skimmed over briefly because it was confusing. Our student gives their friend an answer but then they pause for a minute. They're not sure if they've explained the theory correctly. Maybe they've mixed things up. They start to feel like maybe they don't know the content as well as they thought. So, they decide to go back to their notes to review things again. They also reach out to another classmate to confirm their new answer just before the midterm.

After their midterm, the student decides that instead of skimming over some of the more challenging content, they'll make note of it and what was unclear to them, and that they'll bring their questions to discuss in tutorial and meet with their professor to get clarity, well ahead of the final exam.

This scenario helps illustrate some of the most important and complex skills and processes that great learners cultivate and practice – self-regulation and metacognition – which are critical not only to your success as a student but also as a professional.

We can think of self-regulation and metacognition as very closely related.

Metacognition can be understood as the process of thinking about one's own thinking. In a university setting, this includes having knowledge of your own learning and monitoring your learning.

Self-regulation can be defined as the ability to assess and understand our internal state--our emotions, motivations, and skills-- and develop an action plan or strategy to effectively respond to external challenges. This includes planning, monitoring success, and correcting errors. When we goal set and try new learning strategies, or seek out particular resources to help us achieve our plans, or change our plan of action, we are practicing self-regulation. Having well-developed metacognitive thinking skills and self-regulation is associated with improved learning and academic performance. Self-regulation also helps build up your resilience so that you can work through challenges.

Let's look back at our example. Our student goes through the process of assessing their own thinking and knowledge when they provide their answer to their friend and realize that they weren't too sure if it was correct.

As they reflect on this experience, our student realizes that they didn't actually understand the theory very well and only skimmed over it as they studied because it was challenging. And so, this is why they don't feel very confident in their response and knowledge of the content. In this case, the student's metacognition was correct -- they weren't as prepared as they thought for their midterm. They realized that their original plan to review their notes the weekend before the midterm also created some challenges. By reflecting on this, they develop a new study plan going forward to help them prepare for the final exam, which illustrated their ability to self-regulate their learning as well. You can see then, how the two are closely related and how important they can be for learning and development.

In class, your instructors may help you develop skills in self-regulation and metacognition in different ways, not only to help you succeed academically and grow as a learner, but also to help you think like a professional and approach problems like a professional in your discipline would.

Through different activities and lines of questioning, you have the opportunity to practice thinking metacognitively and exercise self-regulatory skills. For example, after you answer a clicker question in class, your instructor may ask you to turn to the person next to you and explain what the main reason for choosing your answer was, and the main reason you did not

choose each of the other answers, to help you think about your thought process and knowledge.

Or ahead of an assignment, your instructor may ask you to discuss your research approach with your peers and discuss your plan for completing an upcoming assignment. These moments are important opportunities to build on. They will help you develop these skills so that you can apply them in professional settings where you'll have to plan and set goals, determine measures of success, and evaluate your performance, learning and development.