

Learning to Learn: Help Your Students Become Better Learners With These Six Tips

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This guest column is part of an occasional series highlighting UA initiatives and efforts aimed at optimizing teaching and learning.

On the first day of each semester, I tell my students that I struggled mightily during my first several college classes, and they always seem surprised and a little embarrassed for me.

Certainly their biology professor came to college knowing how to be a good student?

Sadly, I did not. And I know from teaching thousands of students that many of my own students also need some work to become independent learners. I had to figure it out on my own (spoiler alert: I mostly did). But it shouldn't be so hard: We know a lot about how people learn, and how people can become better learners. Through resources developed by the UA **Learning Initiative** ^[1], we can help our students in a systematic way to build learning habits, helping them to be successful in any course.

These six tips for students may seem like common sense, but they are absolutely essential for improving learning:

Test yourself. Rather than reading over your notes or reading repeatedly, create opportunities that force you to actively remember the information you are learning, making drawings and diagrams as well as writing. The learning-science term for this is "retrieval practice."

Stop cramming. Instead, study in short bursts and then move on to something else. When you return to the topic you studied, you will have partially forgotten it, and your brain will build new connections as you try to recall it. Learning scientists call this "spaced practice."

Ask yourself how each topic relates to what you already know. This helps your brain to build connections between the topics, resulting in more robust learning. Officially, this is called "elaboration."

Mix it up. Alternate your study practice and topics so that you are making connections between related concepts and skills. In the learning sciences, this skill is known as "interleaving."

Be conscious about how and what you are learning. Learn to recognize when you understand something, and when you are struggling. Spend more time on the topics that you DON'T UNDERSTAND, even if it makes you feel anxious. Make a plan that helps you to use the strategies described above, and recognize when a strategy works well (or not) for you. This habit, called "metacognition," is critical to move you along as an independent learner.

Examine your beliefs about learning. Do you believe you can improve your learning through effort – or that you are either smart, or not? People who believe that practice and strategy can help them to become better learners tend to adopt strategies that build these skills. This is called having a "growth mindset." Unfortunately, many people do not apply this pattern of thinking to all the learning challenges they face.

The Learning to Learn website contains great resources for instructors to learn more about each of these practices. Videos that explain each practice and why it works are accompanied by text examples and UA student and faculty testimonials describing what it looks like in practice. Even better, there are PowerPoint slides containing embedded exercises that can be used in a class setting to share the practice with students and show them how it can help them.

I now explicitly talk with students at the beginning of the semester about how I designed the course to promote these six practices, and how they can make use of these strategies to build their own skills as learners. This has led to better conversations about how to prepare for exams and what strategies to use when they are struggling with concepts.

Interested, but don't want to try this alone? Several UA instructors from across campus have banded together as Learning to Learn ambassadors. We visit classes to deliver a 50- or 75-minute presentation that introduces these strategies and allows students to practice using them. It is particularly impactful when scheduled just after the first major assessment (paper or midterm exam), but we are available at any point in the semester. Some instructors call on us to present when they are traveling out of town – a great alternative to canceling class. To schedule a visit, go to <http://academicaffairs.arizona.edu/I2I-visit-request-form> ^[2].

Lisa Elfring is assistant vice provost for instruction and assessment and associate professor of molecular and cellular biology.

Source URL:<https://uaatwork.arizona.edu/lqp/learning-learn-help-your-students-become-better-learners-these-six-tips>

Links

[1] <http://academicaffairs.arizona.edu/learning2learn> [2] <http://academicaffairs.arizona.edu/l2l-visit-request-form>