Executive Function: Planning for Learning Success

Executive function networks in the brain allow us to plan ahead, make decisions, and progress accordingly. Since Universal Design for Learning is based off of how the brain works, it encourages increased attention to how executive functioning works in the classroom.

Some of our students have learning disabilities that restrict executive functioning capabilities, such as ADHD, but executive functions can also be taxed for any student getting acclimated to how learning works in higher education. Executive function also decreases when we are tired, stressed, and scared, as discussed in our learning tip Essential Conditions for Learning. Some common ways for us to aid executive functioning and, in turn, help students focus on the learning itself, is by breaking down large tasks into smaller ones through scaffolding, feedback, and planning mechanisms.

An Example of Executive Function Support

When "Exam 1: Chapters 1-6" is listed in the syllabus:

❏ Can a general directions like "Read Chapters 1-6," be explained in terms of class engagement and assessment, such as "Be prepared to use the vocabulary to evaluate to case studies" and "Be able to explain all four theories briefly, and be prepared to share questions and discuss one theory in depth." *For more on this see Reading Transparency Teaching Tip.*

❏ Do students know what types of questions they will be asked and how to best go about studying the content?

❏ If the textbook provides practice problems, are they a model for questions they will be asked on the exam?

❏ Will multiple choice questions be on the exam?

❏ Will the questions ask for definitions, solving equations, navigating scenarios, or something else?

❏ Will questions refer to the textbook, instructional content, or something else?

❏ Can students write practice questions as a class activity to see if they are understanding what they might be asked? Can this also help you, as perhaps

some of those questions could be used on the exam itself to ensure timely versions?

If your course uses assessments other than exams and readings, consider how the questions can be applied to your course and projects. If your assign students to read case studies, how do you expect students to demonstrate what they read in class? For other assessment types, like an essay or business presentation, consider additional ways you can scaffold final work, such as providing models, reviewing drafts, listing expectations, and providing suggested development timelines.

Benefits for You and Students

These measures do not lower the standards of what students learn and how they demonstrate that learning, but rather provide more opportunities for students to reach and exceed your high standards. If it seems like attending to executive functioning is added labor, consider measures that are most likely to reduce student email questions and confusion, and consider how students themselves can support one another. For example, if your students write academic papers that require attending to a lot of style rules, can students collaborate to write a paper checklist that prevents issues in the final versions they submit to you? (See political science professor Clare Brock's paper checklist example.)

References and Resources

Executive Functions is explained in Guideline 6 of the Universal Design for Learning Principle of Action & Expression: CAST (2018). Universal Design for Learning Guidelines version 2.2. Retrieved from http://udlguidelines.cast.org

Brock, C. (2019 October 8). Assignment Pre-Submission Checklist. Clare Brock Blog: http://www.clarebrock.com/blog/assignment-pre-submission-checklist

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