

HELP STUDENTS IMPROVE THEIR LEARNING BY TRANSFORMING THEIR ATTITUDES ABOUT THE MEANING OF LEARNING

KEYNOTE

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EXTENDED ABSTRACT

Students enrolled in college today are, in many respects, quite different from students enrolled a few decades ago. Many learners today seem more focused on being credentialed and less concerned with expending effort to gain a deep understanding of the principles taught in their courses. There is currently a very large gap between faculty expectations of student behavior and actual student behavior. As reported in the Higher Education Research Institute Report *The American Freshman: National Norms Fall 2015*, 55.2% of students entering their first-year of college reported that they had spent less than six hours per week studying or doing homework, yet 58.7% graduated from high school with an A average (Egan et al, 2015). College faculty members generally expect students to spend two to three hours outside of class for every hour spent in class. This represents a significant gap between professors' expectations of the effort that students will exert in courses and the students' past experience with the amount of study time necessary for success.

Faculty members often see students who come for help in understanding why they are performing poorly on examinations. If faculty made inquiries into their learning strategies and study habits they would find that students routinely wait until one or two nights before the test to begin studying the material, concentrate on cramming during "all-nighters," and then go into the examination thinking that they know the material. Most students have no concept of the difference between memorizing information and understanding concepts at a level that allows them to use the concepts to think critically and successfully solve problems. A detailed discussion of the different levels of learning, based on Bloom's taxonomy (Bloom, 1956), provides students with the information to understand the difference between the learning level at which they are operating (typically memorizing), and the minimum level required to think critically and solve problems in their college courses (usually application or higher). When students learn the reason for their underperformance, and are provided with specific strategies, they change their mindset from thinking that they are not smart enough to excel, to one that attributes their lack of success to lack of effort. This is consistent with the work of Carol Dweck, as reported in *Mindset: The New Psychology of Success*. (Dweck, 2007) They learn that they can "grow" their intelligence, and work to do just that. The view that intelligence can be increased is supported by David Shenk in his book *The Genius in All of Us: Why Everything You've Been Told About Genetics, Talent, and IQ Is Wrong* (Shenk, 2010).

Faculty members generally assume that students know that memorizing information is not learning. This assumption, however, is unwarranted. Today's students must be explicitly taught the difference between activities such as remembering, understanding, applying, analyzing, evaluating, and synthesizing in the hierarchy of learning tasks. And they must be taught how to self-assess their mastery of course material. Without explicit instruction and clearly defined expectations, they will generally not be able to perform at the desired level, and will be unable to attain the specified learning outcomes.

Cognitive science provides the theoretical foundation for the success of the learning strategies that faculty can teach students. When students are taught how to use metacognitive learning strategies, they are equipped with a means of taking control of their own learning process and learn to change their mindset and self-regulate their learning activities. They are more likely to become independent learners who are motivated to spend more energy on learning the concepts than on memorizing the information for the test (McGuire, 2015).

It is important that the learning process be understood by college administrators, faculty, and student service professionals, so that all are equipped to help students achieve specified student learning outcomes. Implementing the strategies that will be discussed in this keynote, colleges and universities can transform our students from passive “memorizers” into actively engaged “learners”. The resulting increase in student involvement, enthusiasm, and performance make the energy that must be expended to effect this transformation a worthwhile investment on the part of the institution and the students.

SELECT REFERENCES

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