

Create Activities that Encourage Deep Processing and Improve Student Learning

Deep processing produces a more enduring memory for new information than does shallow or surface learning. This effect is well-documented in the cognitive research literature (Roediger, Gallo, & Geraci, 2002). Instructors can encourage students to engage in deep processing by creating learning tasks that can be completed only if students engage in deeper processing. Examples of tasks that induce deeper processing include the following:

- Students describe how a concept or other material in the course might apply to them, a member of their family, their friends, or some real-life setting.
- Require students to write a paraphrase of the content of reading material or a section of lecture using their own words. This can be done by assigning a minute paper or other short writing exercise in class following a discussion of this material. This assignment also gives students immediate feedback on the quality of their understanding of the material and helps calibrate self-evaluations of learning.
- Students generate a novel example of a concept presented in text or lecture.
- Ask students to describe how concepts in the current class are related to material or concepts discussed in other classes in the discipline.

Additional examples of the use of research findings about cognitive processes to structure classroom experiences and student assignments to improve student learning are described by Margaret Matlin (2007).

Matlin, M. (2007). How cognitive psychology can enhance your students' learning. In S. A. Meyers & J. R. Stowell (Eds.), *Essays from E-xcellence in Teaching* (Chapter 9), Volume 7.

E-book retrieved from the Society for the Teaching of Psychology Web site:
<http://teachpsych.org/resources/e-books/eit2007/eit2007.php>

Roediger, H. L., III, Gallo, D. A., & Geraci, L. (2002). Processing approaches to cognition: The impetus from the levels-of-processing framework. *Memory*, 10, 319-332.

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