Magna 2 Minute Mentor

How Can I Enhance Students' Self-Regulated Learning Skills?

Presented by:

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Start of Course: Reading and Discussion on "Learning" and "Thinking"

Learning (Your First Job), by Robert Leamnson (2002) at http://www.udel.edu/CIS/106/iaydin/07F/misc/firstJob.pdf

12-page essay on the brain biology of learning; the difference between "understanding" and "remembering"; how to listen actively to a lecture and take notes; how to develop an interest in a subject; how to use out-of-class time productively; the difference between "knowledge" and "information" and how to use the former to make sense out of the latter; and how to prepare for and take exams. Learnison gives wise, research-based advice on how to study and effectively drives home the point that learning involves work and effort for all students but can be very rewarding.

Learning to Learn, by Karl R. Wirth and Dexter Perkins (2008) at http://www.macalester.edu/geology/wirth/learning.pdf

29-page manuscript (longer and more advanced than Leamnson's) on the failure of traditional teaching; the shift from teaching to learning; the student learning needs for the 21st century; thinking and learning in the cognitive, affective, and psychomotor domains; Fink's categories of significant learning; Kolb's learning cycle; the changes in the brain associated with learning; Perry's stages of intellectual development; Baxter Magolda's levels of intellectual development; Paul and Elder's elements of critical thinking; metacognition; Felder's learning style dimensions; the behavioral dimensions of grades; and the contrasting characteristics of successful, average, and struggling students. If you assign this kind of reading, leave time for in-class **discussion** the date it is due. The discussion may start out with some recall (recitation) questions that warm up students' minds to the material, but a good *discussion* is an exchange of experiences and viewpoints, so it relies on asking questions with multiple correct answers, like these:

- What was the most important insight you gained from the reading?
- What surprised you most in the reading?
- What did you already know?
- Did you identify with any of Kolb's learning styles? Which one or ones?
- Which one of Perry's stages of intellectual development did you identify with?
- Have you been taught how to learn before? Where? What did you learn about learning?
- What will you do differently during a lecture, if anything, given what you read?
- How will you prepare differently for exams, given what you read?
- Can you think of other good learning practices that the reading didn't mention?

Form below is used by the Academic Success Center at Clemson University. It was developed from models in Achacoso (2004) and on the Academic Advising and Support Services, Loyola University website (n.d.).**

POST-TEST ANALYSIS

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I)1	recti	ions

1. Complete the top portion. Be specific and honest. Describe the way you did (or didn't) study.

Course	Test Date	
Predicted Grade:	Actual Grade:	% Total grade
Study details (days/time spent SU/tutoring sessions attended		ods used, meetings with instructor,

- 2. Understand the questions you missed. Write the question number in the "Question Missed" column.
- 3. Complete the chart. How many points were taken off? What kind of question was it? Why do you think you got it wrong?
- 4. Look for patterns. Why was material unfamiliar? Did you miss reading an assignment, or working assigned problems for homework? Did you read the question carelessly?
- 5. What can you learn from your successes and failures?

Question Profile			Reason Answer Was Incorrect			
Question Missed	Points Lost	Type of Question*	Careless- ness	Unfamiliar Material	Misinterpreted Question	Did not complete

*MC = Multiple Choice	ESS = Essay	FOR = Formula	MA = Matching	Cal = Calculation
DER = Derivation	T/F = True/false	WP = Word problem		

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Self-Regulated Learning Resources

Academic Advising and Support Services, Loyola University, Chicago. (n.d.). Available at http://www.luc.edu/advising/pdfs/postexam_survey.pdf

Achacoso, M. V. (2004). Post-test analysis: A tool for developing students' metacognitive awareness and self-regulation. In M. V. Achacoso & M. D. Svinivki, (Eds.), *New directions for teaching and learning*, *No. 100: Alternative strategies for evaluating student learning* (pp. 115-119). San Francisco: Jossey Bass.

Azevedo, R., & Cromley, J. G. (2004). Does training on self-regulated learning facilitate students' learning with hypermedia? *Journal of Educational Psychology*, 96(3), 523-535.

Barkley, E. F. (2009). *Student engagement techniques: A handbook for college faculty*. San Francisco: Jossey-Bass. Using post-test analysis to help students see correlation between effort and performance. Reprinted in *The Teaching Professor*, 23(10, December), 1.

Bell, P., & Volckmann, D. (2011). Knowledge surveys in general chemistry: Confidence, overconfidence, and performance. *Journal of Chemical Education*, 88(11), 1469-1476. doi: 10.1021/ed100328c

Lovett, M. C. (2008, January). Teaching metacognition. Presented at the annual meeting of the Educause Learning Initiative (ELI). Available at

 $\frac{http://net.educause.edu/upload/presentations/ELI081/FS03/Metacognition-ELI.pdf}{http://www.educause.edu/Resources/TeachingMetacognition/162556} \ and \ \frac{http://www.educause.edu/Resources/TeachingMetacognition/162556}{http://www.educause.edu/Resources/TeachingMetacognition/162556} \ and \ \frac{http://www.educause.edu/Resources/TeachingMetacognition/162556}{http://www.educause.edu/Resources/TeachingMetacognition/162556} \ and \ \frac{http://www.educause.edu/Resources/TeachingMetacognition/162556}{http://www.educause.edu/Resources/TeachingMetacognition/162556} \ and \ \frac{http://www.educause.edu/Resources/TeachingMetacognition/162556}{http://www.educause.edu/Resources/TeachingMetacognition/Resources/TeachingMetacognition/Resources/TeachingMetacognition/Resources/TeachingMetacognition/Resources/TeachingMetacognition/Resources/TeachingMetacognition/Resources/Reso$

McDaniel, M.A., Howard, D.C., & Einstein, G.O. (2009). The Read-Recite-Review study strategy: Effective and portable. *Psychological Science*, 20(4), 516-522.

Nilson, L. B. (2013). Creating self-regulated learners: Strategies to strengthen students' self-awareness and learning skills. Sterling, VA: Stylus.

Nilson, L. B. (2013, October 18). The top ten reasons why we have to teach our students how to learn. Invited StylusPub blog posting. Available at http://styluspub.wordpress.com/2013/10/18/the-top-ten-reasons-why-we-have-to-teach-our-students-how-to-learn/

Nuhfer, E. B., & Knipp, D. (2003). The knowledge survey: A tool for all reasons. *To Improve the Academy*, 21, 59-78.

Roediger, H. L., III, & Karpicke, J. D. (2006). The power of testing memory: Basic research and implications of the educational practice. *Perspectives on Psychological Science*, 1(3), 181-210.

Schraw, G. (1998). Promoting general metacognitive awareness. *Instructional Science*, *26*, 113-125. Available at http://www.springerlink.com/content/w88410214g78445h/

Schunk, D. H., & Zimmerman, B. J. (Eds.). (1998). Self-regulated learning: From teaching to self-reflective practice. New York: Guilford Press.

Winne, P. H. (2005). A perspective on state-of-the-art research on self-regulated learning. *Instructional Science*, *33*, 559-565.

Wirth, K. R. (2008a). A metacurriculum on metacognition. Opening keynote address presented at the National Association of Geoscience Teachers (NAGT) Workshops: The Role of Metacognition in Teaching Geoscience, Carleton College, Northfield, MN, November 19-21. Available at http://serc.carleton.edu/NAGTWorkshops/metacognition/wirth.html

Wirth, K. R. (2008b). Learning about thinking and thinking about learning: Metacognitive knowledge and skills for intentional learners. Session resented at the National Association of Geoscience Teachers (NAGT) Workshops: The Role of Metacognition in Teaching Geoscience, Carleton College, Northfield, MN, November 19-21. Available at

 $\underline{http://serc.carleton.edu/NAGTWorkshops/metacognition/workshop08/participants/wirth.html}$

Wirth, K. R. & Perkins, D. (2008). Knowledge surveys. Session presented at the National Association of Geoscience Teachers (NAGT) Workshops: The Role of Metacognition in Teaching Geoscience, Carleton College, Northfield, MN, November 19-21. Available at http://serc.carleton.edu/NAGTWorkshops/assess/knowledgesurvey/

Zimmerman, B. J., & Schunk, D. H. (2001). *Self-regulated learning and academic achievement: Theoretical perspectives*. Mahwah, NJ: Lawrence Erlbaum Associates.

Websites

http://www.selfregulatedlearning.blogspot.com/

http://bigenhoc.wordpress.com/2010/02/24/helping-students-develop-self-regulated-learning-habits/

http://www.gifted.uconn.edu/siegle/selfregulation/section8.html

http://www.facultyfocus.com/articles/teaching-and-learning/what-it-means-to-be-a-self-regulated-learner/

http://www.expertlearners.com/srl.php