FACULTY FOCUS

HIGHER ED TEACHING STRATEGIES FROM MAGNA PUBLICATIONS

June 16, 2014

Trouble viewing this email?
Read it on the web here.

http://ww1.facultyfocus.com/eletter/profile/1/56.html

The Secret of Self-Regulated Learning

By: Linda B. Nilson, PhD

Self-regulated learning is like your own little secret. It stirs from within you, and is the voice in your head that asks you questions about your learning.

More formally, self-regulated learning is the conscious planning, monitoring, evaluation, and ultimately control of one's learning in order to maximize it. It's an ordered process that experts and seasoned learners like us practice automatically. It means being mindful, intentional, reflective, introspective, self-aware, self-controlled, and self-disciplined about learning, and it leads to becoming self-directed.

Another secret about self-regulated learning is its strong positive impact on student achievement. Just the cognitive facet of it, metacognition, has an effect that's almost as large as teacher clarity, getting feedback, and spaced practice and even larger than mastery learning, cooperative learning, time on task, and computer-assisted instruction (Hattie, 2009).

Self-regulated learning also has meta-emotional and environmental dimensions, which involve asking oneself questions like these:

- How motivated am I to do the learning task, and how can I increase my motivation if I need to?

- If my confidence in my ability to learn this material sags, how can I increase it without becoming overconfident?

- Am I resisting material that is challenging my preconceptions?

- How am I reacting to my evaluation of my learning?

- How can I create the best, most distraction-free physical environment for the task?

Metacognitive questions include these:

- What is the best way to go about this task?

- How well are my learning strategies working? What changes should I make, if any?

- What am I still having trouble understanding?

- What can I recall and what should I review?

- How does this material relate to other things I've learned or experienced?

Asking oneself these questions also constitutes elaborative rehearsal, which is the thinking process that moves new knowledge into long-term memory.

Just because we may practice self-regulated learning doesn't mean our students do. Most of us were among the best students, especially in college, and the best students can become the worst teachers because we quickly knew how to master the material.

In fact, few of our students demonstrate self-regulation—not even those in professional schools. When asked to identify the factors they considered important in their learning, 132 veterinary students most commonly cited the quality of their faculty's instruction, not their own effort or learning skills (Ruohoniemi & Lindblom-Ylänne, 2009). Not surprisingly, younger, undergraduate students have the same mind set. They see learning as something that is "happening" to them, and our job is to make it happen and make it easy. After all, learning was easy in elementary and high school, so why should it require much time and hard work now?

How do you get students to practice self-regulated learning? First, you explain to them what it is and how it will benefit them and then have students do self-regulated learning activities in class and as homework. Then you wait for them to see the good results.

Students don't mind these assignments. They're short, low-stress, and worth a point or two, and students learn about themselves. You don't mind them either because, with 90% of them, you just give credit for completion: pass/fail, all points or no points. Most in-class activities don't even require this. You need only to grade the major reflective meta-assignments, the kind that accompany service-learning, problem-based learning, or a lengthy simulation.

Let's consider a few proven self-regulated learning activities and assignments; many more are in *Creating Self-Regulated Learning: Strategies for Strengthening Students' Self-Awareness and Learning Skills* (Stylus, 2013):

- Students answer two or three reflective questions on the reading or podcast.

- They write about what they learned by doing an assignment.

- They re-do the same or similar problems to the ones they miss on their homework and exams and explain the proper procedure.

- They describe their reasoning process in solving a "fuzzy" problem – how they defined the problem, decided which principles and concepts to apply, developed alternative approaches and solutions, and assessed their feasibility, trade-offs, and relative worth.

- They reflect on a graded exam by answering questions like these:

  - How to you feel about your grade? Were you surprised?

  - How did you study for the exam? Did you study enough?

  - Why did you lose points? Any patterns?

  - What will you do differently to prepare for the next exam?

Students *do* see the effects on their academic performance. In a recent experimental study on multiple sections of mathematics students (Rolf, Scharff, & Hodge, 2012), instructors assigned pre-class homework of a reading and questions on it. In the treatment group, they explained the learning benefits of this homework and had the students complete three reflection forms during the semester on how the process was affecting their learning. The control group received neither the explanation nor the reflective forms. The treatment-group students scored higher on the final exam, answered more of the optional questions during the course, and expressed greater appreciation of these assignments in helping them learn.

References:

Hattie, J. (2009). *Visible learning: A synthesis of over 800 meta-analyses relating to achievement.* New York: Routledge.

Rolf, J. S., Scharff, L., & Hodge, T. (2012). Does "thinking about thinking" impact completion rates of pre-class assignments? Paper presented at the Joint Mathematics Meetings, Boston, January 4.

Ruohoniemi, M., & Lindblom-Ylanne, S. (2009). Students' experiences concerning course workload and factors enhancing and impeding their learning – a useful resource for quality enhancement in teaching and curriculum planning. *International Journal for Academic Development, 14*(1), 69-81.

Dr. Linda B. Nilson directs the Office of Teaching Effectiveness and Innovation at Clemson University.