Dr. McGuire’s Metacognitive Strategies

In March, URI’s Office for the Advancement of Teaching & Learning and the Academic Enhancement Center presented some of Dr. Saundra McGuire’s most powerful metacognitive learning strategies to nearly 250 students.

Over 50 students participated in the *Ace Your Course Challenge* testing out one or more of her strategies for five weeks.
I received my second quiz back from my Italian class. On the first one I got a 75, and after changing my study habits, I got a 91 this time!!

My grades have improved. 97.5, 95 and 90 on three very important exams.

I got a 93 on my last genetics exam!

I can tell that my strategies are working and it is not just simply easy material on those particular exams because the average of the most recent exam was a 70 and I received a 100%, which I am very proud of.
# What Strategies Did Students Use?

<table>
<thead>
<tr>
<th>Strategy</th>
<th>Percent Using</th>
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<tbody>
<tr>
<td>Spent time on course every day</td>
<td>67.9%</td>
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<tr>
<td>Used the study cycle</td>
<td>58.5%</td>
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<tr>
<td>Practiced teaching the material</td>
<td>45.3%</td>
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<tr>
<td>Completed homework like a test</td>
<td>34.0%</td>
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<tr>
<td>Bloom’s Taxonomy questions</td>
<td>24.5%</td>
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<tr>
<td>Did more problems</td>
<td>15.1%</td>
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What They Did

• Going over the material every day has definitely helped me learn the information much better... Teaching the information has also taught me when I need to go much further if I am not able to explain it to someone else.

• Using the study cycle as a learning strategy helped me in my animal reproductive class, as it encouraged me to spend more time with the material. It certainly made studying for my exam this week a little less stressful as well. I felt I had a better understanding of the material as I began studying for the exam than I have in the past.
96% Report Increased Confidence

- I feel much more comfortable in class and willing to ask questions that I know other people in the class are thinking too.
- I feel as though I have improved tremendously in not only my numerical grade but in my understanding of the content.
- I've realized I'm understanding things better versus last semester when I was flailing blindly because I couldn't understand anything.
- My learning has become so much more serious and confident since I have been using these strategies for almost a month.
People Notice the Difference

• My teacher for reproduction noticed that I have been doing much better on in class quizzes and even mentioned it on one of them that I completely aced.

• My professors have begun to point me out as a good student.

• My peers are telling me they see a change in my retention of information and I am doing better in my courses.
Experiencing Deep Learning

• I feel like it is taking me less time to understand topics because instead of constantly reviewing I can learn "deep" once or twice and know the topics fully.

• I can easily remember information from previous lectures. I'm also able to teach these topics to friends.

• I have retained more and even remembered things like chemical formulas that I didn't intend on learning.

• I finally learned how to study in physics.
Feeling Great!

• I have raised my grade in one class from a B to an A-!!!
• I feel great! I used the technique from last time studying a little every day and practice teaching the material and went from a grade of a 65 to a 92 in my pharmacology class.
• It has definitely changed my outlook on how I study and how I think proper studying is done. I had to change the ways I learned and studied because cramming the day before or just reading over notes or even making of flash cards aren't efficient ways of learning the material.
Advice for Other Students

• Each day after class take 15-20 mins going over the material that was just taught. It not only gets you prepared for an exam but it helps you to also understand the material that same day rather then trying to re-learn it a week later.

• Review material after the class, teach concepts to friends, and do homework like a test.

• Use the study cycle! While it may seem like extra work in the beginning, it really just separates and spreads out the studying.