Faculty Development Day

Metacognition: the LSUS Quality Enhancement Plan
What is Metacognition?

• “Thinking about Thinking”,
• “Self-Regulation”,
• “Meta-Memory”,
• “Executive Control”

What is Metacognition?

Students develop an awareness of how they learn:

- Plan
- Monitor
- Evaluate

**Metacognition is a strong predictor of academic success.**

Coutinho, Savia A. (2007)
A Quality Enhancement Plan is a SACS-COC Requirement

What is our greatest need at LSUS?
Retention of students, currently
  1/3 of LSUS freshmen do not return
  1/2 of LSUS sophomores do not return

Why are students leaving?
Because the strategies that worked in high school are not effective in college
<table>
<thead>
<tr>
<th>Cognition</th>
<th>Metacognition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Understanding a text</td>
<td>Being aware of one’s understanding of the text</td>
</tr>
<tr>
<td>Thinking</td>
<td>Monitoring and controlling your thinking</td>
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Reading: as too often practiced by students

1. Read the text
2. Take notes
   (i.e. mechanically copy information from textbook to notebook)
Reading: a Metacognitive Practice

1. Preview the text
2. Read the text
3. Check back during the first read
4. Ask questions (self generated)
5. Re-read
6. Clarify
**LSU student definitions**

<table>
<thead>
<tr>
<th>Studying</th>
<th>Learning</th>
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<tbody>
<tr>
<td>Short term memorization of material for a test</td>
<td>Deep understanding of information allowing the learner to <strong>apply</strong> the concepts</td>
</tr>
<tr>
<td>Tedious</td>
<td>Fun</td>
</tr>
</tbody>
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(adapted from McGuire 2008)
Teach students
1. to become aware of their level of understanding
2. to aspire for the top of the pyramid

http://www.maxvibrant.com/bloom-s-taxonomy/bloom-s-taxonomy
Self-Misperception

A recent study of entering freshmen at a large public university found:

- **46%** of the students had an “A” average in high school.
- **34%** reported studying or doing homework for 6 or more hours a week.
- **70%** thought they were **above average**, or in the top 10% of people their age.

(Study by the Higher Education Research Institute, cited in McGuire 2008)
Results from a self-diagnostic question after the first exam in Psych 101 taught by Dr. Stephen Chew, Samford University, Birmingham, Alabama.

(Each point represents a student).

(Dr. Stephen Chew, https://www.youtube.com/watch?v=RH95h36NChI)
Metacognition

Learning through Engagement

(Dr. Stephen Chew, https://www.youtube.com/watch?v=RH95h36NChI)

- Students who had an accurate idea about how they performed would place on the diagonal, whereas students who scored better than they thought they had, would be above the diagonal. The overconfident students placed below the diagonal. Note how there are few students above the diagonal, these are the students who did better than expected. Examine the upper right hand corner, these are the students who did best, and they are close to the diagonal. In the center of the graph are the students who did poorly and they are well below the diagonal.
Dr. Chew’s results bear out Dr. McGuire’s findings; the weaker students thought they had performed better than they had, and thus may be thought of as having poor metacognition. They were unprepared and over confident but the most significant conclusion is that students were totally unaware of their deficiencies.

(Dr. Stephen Chew, https://www.youtube.com/watch?v=RH95h36NChI)
Goals of the QEP

1. Students will improve their learning by *monitoring* their own learning progress during a course.

2. Students will improve their learning by *adjusting* their learning strategies to align with the learning task.

3. Students will improve their learning by *evaluating the outcomes* of their learning efforts.
If we can teach our students to become engaged learners, paying attention to their cognitive involvement in the learning process, we believe we can increase enrollment and retention. The QEP committee is convinced that we can do this literally "across the curriculum" starting with our freshman seminar classes and on through to the 400 level classes.
The QEP committee members are:

Paula Atkins, Julie Lessiter, John S. Vassar, Emmanuel Clottey, Karen James, Stephen Banks, Rick Mabry, Tracey Burrell, Cindy Sisson, Stephanie Aamodt, Bill Peters, Jon Baarsch, Alex Mikaberidze and Helen Taylor.

The Committee has a great deal of work to do in addressing the rigorous requirements of a SACS-COC approved quality enhancement plan.