STUDENT ROLE IN LEARNING:
WHAT IS THE GOAL AND HOW DO WE GET THERE?

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“The one who does the work does the learning”
(Doyle, Terry, 2008, p. 63)
How do we get buy-in from the students?

• Why do students resist learner-centered teaching?

• What factors contribute to a student’s poor performance?
Topics for small group break-outs

1. How do we motivate students to take ownership of their own learning?
2. How do students learn what their role will be?
3. Why are students poor judges of effectiveness of study strategies?
4. How do students know when they have mastered the material?
5. How do we provide students opportunities to practice taking on their roles and evaluate whether they are performing satisfactorily?
6. How do we ensure our evaluation of students is consistent with the roles they have been required to take on in the course?
What are some challenges/issues?

What can faculty do?

Who are your partners/allies?
What resources are needed?

What can students do?
Small Group → Individual Ideas → Group Consensus
Whole Group → Share → Best Actions
Small Group → Individual Top 3 → Share
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BEST ACTIONS

What can faculty do?       What can students do?
Learning in a Learner-Centered Environment

BIOC 335 Cellular and Molecular Animal Physiology
12-Jan-2016

BIOC 335 (2014) Photo: Carlyn Chatfield
Is it learning if we don’t remember?

I see and I forget.
I hear and I remember.
I do and I understand.
— Confucius

After 2 weeks, we tend to remember...

- 10% of what we READ
- 20% of what we HEAR
- 30% of what we SEE
- 50% of what we SEE & HEAR
- 70% of what we SAY
- 90% of what we SAY & DO

Source: Edgar Dale (1969)

http://www.finquiz.com/blog/2012/03/16/what-if-i-could-show-you-how-to-remember-90-of-what-you-studied-would-you-be-interested/

Think–Pair–Share

- How do you know when you know something?
- How do we know when you know something?

Learning is brain change

www.braininstitute.ca
thinking about thinking

• **Awareness** of my thinking processes
  What do I know? What do I need to know? Where will I find it? How will it be evaluated?

• **Planning** my strategies
  How long will it take? What are my priorities? How should I organize my time? Am I on the right track? What approach should I use?

• **Reflection** (*formative/summative*)
  What works best for me? What doesn’t? Is this approach generally useful? Why? Why not? What can I take away from this experience?
<table>
<thead>
<tr>
<th>Learner-Centered Student Roles</th>
<th>Learner-Centered Student Responsibilities</th>
</tr>
</thead>
<tbody>
<tr>
<td>Work in teams/groups</td>
<td>Take more control of one’s own learning</td>
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<tr>
<td>Self-teach</td>
<td>Make choices about one’s own learning</td>
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<tr>
<td>Teach others</td>
<td>Give input to the evaluation/assessment methods of the course</td>
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<tr>
<td>Evaluate own learning</td>
<td>Give input to course structure and guidelines</td>
</tr>
<tr>
<td>Evaluate others’ learning</td>
<td>Give formative feedback on learning to peers</td>
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<tr>
<td>Perform/present learning publicly</td>
<td>Evaluate one’s own learning</td>
</tr>
<tr>
<td>Learn new “how-to-learn” skills and strategies</td>
<td>Spend more time learning outside of class</td>
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<tr>
<td>Engage in reflection</td>
<td>Demonstrate use of teacher feedback to improve performance</td>
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<tr>
<td>Solve authentic problems</td>
<td>Take learning risks</td>
</tr>
<tr>
<td>Demonstrate use of teacher feedback to improve performance</td>
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<td>Participate in discussions</td>
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<tr>
<td>Read the textbook and articles before class</td>
<td>Do homework</td>
</tr>
<tr>
<td>Participate in discussions</td>
<td>Take quizzes and exams</td>
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</tbody>
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Learn from “desirable difficulties”
Why are we asking you to change the way you learn?

**Rationale**
- Learning requires active engagement
- Career preparation
- Lifelong learners
- Preparation for future learning

**Research about How People Learn**
- Neurons and neuronetworks
- Pattern recognition
- Long-term recall
- Effect of fear and stress
- Power of images
Some basic strategies you can take with you

• Explain to students how learning works
• Teach students how to study
• Create desirable difficulties
• Be transparent

(from Make It Stick, 2014, Ch. 8)

Have students reflect on their learning
SMALL ACTION
BIG CHANGE
Acknowledgements

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Resources


• Major, Claire H., Harris, Michael S., and Zakrajsek, Todd (2016) *Teaching for Learning* (Routledge)

• Nilson, Linda B. (2013) *Creating Self-Regulated Learners* (Stylus Publishing, LLC.)
Self-regulated learning enhances

- Student performance/achievement (most likely #1 motivator!)
- Amount and depth of student thinking
- Students’ conscious focus on their learning
- Development of reflective and responsible professionalism

(from Creating Self-Regulated Learners, 2013, pp. 10-12)