Goodbye Lecture, Hello Engaged Classroom Learning

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Financial Disclosures

• Dr. Glen Medellin and Dr. Haneme Idrizi have no relationships with commercial companies to disclose.

Learning Objectives

• Identify and incorporate in-class room technologies to support student learning in creative and innovative ways.
• Recognize the levels of learning (i.e. Bloom's Taxonomy) & utilize in development of effective learning objectives.
• Describe the flipped classroom and why it best serves to encourage active learning.
• Incorporate different methods of engaged classroom learning in teaching to promote student engagement through active learning.

Engaging Your Students

• Students needed a 3 to 5 minute period of settling down.
• Followed by 10 to 18 minutes of optimal focus.
• Then — no matter how good the teacher or how compelling the subject matter — there will come a lapse.
• Attention returns, but in ever briefer packets, falling to 3 or 4 minute spurts towards the end of a standard lecture.

Attention Breaks in Lectures, Johnstone, A. H.; Percival, F. Education in Chemistry, 13, 2, 49-50, Mar 76

Engaging Your Students

• Pause to pose a "thought problem"
• Assign short tasks to pairs or trios
• Solicit specific questions from students
• Consider including discussion of a case study
• Allow time for students to write a summary of lecture key points
• Use technology

Building Interactivity Into the Lecture
Technology in the Classroom

- Audience response systems (ARS)
- Nearpod
- iPad presentation
- Videos

Audience Response System

- poll everywhere.com

Networked classroom

- nearpod.com

iPad

- Reflector

The Flipped Classroom

Which of these is true about the flipped classroom?

- A. High performing students sit in the back while low performing students sit in the front.
- B. Students get first exposure to content before class in preparation to participate and apply concepts in class with feedback.
- C. Faculty or teachers are replaced with computers and students are required to teach themselves.
- D. Students get first exposure to content in classroom with direct instruction and apply the concepts outside of class.
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The Flipped Classroom

http://blog.peerinstruction.net

Traditional vs Flipped Classroom

http://katatrepics.com

Bloom’s Taxonomy

Taxonomy Outcomes for Flipped Classroom Activities

Identification Desired Results:
What are my desired outcomes or learning goals for the students?

Determing Acceptable Evidence:
How will students and I know that they've met their goals or evidence of learning?

Plan learning experience and instruction (Design Instruction): How will you help students achieve results?

Components of the Flipped Classroom

Content Delivery
Pre-Class

Engagement
In-class

Reflection
Post-class
Pre-Class Learning: First exposure

- Textbooks/eTexts (Vital Source)
- Peer reviewed articles
- SoftChalk
- Videos
- Taped Lectures (aka lecture capture)
- Podcast
- PowerPoint with or without voice-over

In-Class Activities: Engagement

**LARGE GROUP**
- Mini Lecture
- “Guest” speaker
- Experts/Panels
- Audience Response Systems

**SMALL GROUPS**
- Group work (questions, charts)
- Team-based Learning (TBL)
- Case/Problem-based Learning (PBL)
- Concept Maps
- Peer Instruction
- Role Play
- Think, Share, and Write

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Post Class Engagement

- Reflection
- Journaling
- Peer-reviewed articles
- Videos
- Blogging

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Which of these is true about Team-Based Learning (TBL)?

- A. Course goal shifts from knowing to applying
- B. Teacher shifts from “sage on stage” to “guide at side”
- C. Students shift from passive to active learning
- D. All of the above

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Team Based Learning (TBL): Perfect Model of Flipped Classroom

- Backward Design
- Collaborative, Interactive Work
- Learner Driven
- Means of Formative Assessment
- Application of Knowledge

TBL Collaborative
TBL Components

- Pre-class student preparation
- Team Formation
- Individual and Team Readiness Assurance Test (iRAT/tRAT)
- Application Exercises
- Post-class Reflection

TBL in The Medical School

Thank you!

Flipped Teaching + Active Learning = Amazing Educational Possibilities!