Engaging Lecture for Effective Learning

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Learning Goals

• After today’s workshop, you will
  – Have a “road map” to follow when preparing an engaging lecture
  – Understand the importance of incorporating active learning into lectures and have strategies to do so
  – Have designed an active learning activity for one of your lectures
  – Be able to list engaging lecture delivery techniques
Preparation: 
*Getting Ready*

- Know your topic and Audience
  - Demographic and prior knowledge
  - Keep focus narrow; only a **few** key points!

The planning process: Learning goals

- Begin with the end in mind

- How do you hope students will be different afterward?
  - Knowledge, skills, attitudes?

- Stay learner-focused

- Attainable goals
Sample lecture learning goals

• Clinical psychology: Students will be able to differentiate between the major types of psychotherapy.

• Biology: Students will be able to calculate the probability that an individual in a pedigree has a particular genotype or phenotype.

• History: students will understand the major arguments for and against the use of atomic bombs in World War II.

The planning process: Drafting an outline

• Beginning
  — Overview, outcomes, putting it in context, attention grabber
• Middle
  — Making your major points
  — 3-5 major points – less is more!
  — Have a coherent & logical plan for developing your story
• End
  — Recap, assess, point to next session, class business
The Importance of Active Learning in a Lecture

• The 15-minute attention span (Bligh, 2000; Middendorf & Kalish, 1996)
• Only 24% of lecture content retained after 8 weeks!
• Increased student engagement and interaction increases learning gains and retention (Knight & Wood 2005, Prince 2004)

Incorporating Active Learning: Engaged Learning Strategies

• Think-pair-share
• Polleverywhere.com
• Small/Large Group Discussions
• Comprehension Quizzes
• Practice Homework Problems
• Free-writing
Active Learning Elements: When?

- Aim to incorporate at least one active learning element for every 15 minutes of lecture
- Try for one per topic

Putting it all together

- Don’t forget the bookends!

(Smith, 2000)
Preparation: Checklists

<table>
<thead>
<tr>
<th>Things to do before lecture</th>
<th>Items to take to your lecture</th>
</tr>
</thead>
<tbody>
<tr>
<td>– Practice 2x for audience</td>
<td>– Laptop</td>
</tr>
<tr>
<td>– Visit room, see technology</td>
<td>– Connector</td>
</tr>
<tr>
<td>– Make cards</td>
<td>– Laser pointer/clicker</td>
</tr>
<tr>
<td>– Create handout</td>
<td>– “clicker” cards</td>
</tr>
<tr>
<td>– Polish outline</td>
<td>– Handouts</td>
</tr>
<tr>
<td>– Plan for getting feedback?</td>
<td>– Outline</td>
</tr>
<tr>
<td></td>
<td>– Water</td>
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</tbody>
</table>

Final Preparation

- Check out your classroom in advance
- Create an outline that works for you
- Create and polish your multimedia
- Make checklists
- Practice, practice!
  - Transitions, timing, streamlining
- If extra nervous:
  - Script your first 5 minutes
Preparation:
*Presenter View*

- Clarify with primary instructor
- Keep focus narrow; only a few key points!
- Check out your classroom in advance
- Don’t write out your lecture notes like a script
- Practice, practice, practice!

Delivery:
*Before the Lecture*

- Arrive early to set up
- Engage students in conversation *(Davis, 2009)*
Delivery:

*Starting the Lecture*

• Begin with an outline and learning goals  
  – Try the blackboard!
• Get a feel for students’ prior knowledge
• Don’t be afraid to wander!

Delivery:

*Finishing Strong*

• Reserve 5 minutes to recap and wrap up the main points  
  – Better yet, have students recap main points!
• Go over those learning goals again and see if students feel they attained them
• Prepare students for what’s ahead
• Attend to housekeeping
Delivery:
After Your Lecture

• Make notes to yourself immediately after your lecture
• Can even add an extra slide at the end of your lecture and add it in there after your lecture

Resources

Preparing a Lecture

1. Name your topic & audience.

2. List 3 learning goals. What knowledge, skills, or attitudes do you hope students will have as a result of your lecture? Example: students will be able to describe reasons why peanut allergy rates have dramatically increased in the last several decades.

3. Outline or map the body of your lecture below. Think about how you will logically develop your material – in story form? Presenting 2 sides of a debate? Describing a problem and its solution?
4. Plan the timing and method of at least 2 active learning elements. Examples include think-pair-share, working problems individually, clicker questions, notes comparison, etc.

5. Locate or create whatever multimedia materials you will include. Examples include handouts, Powerpoint, video clips, recent newspaper articles, political cartoons, recent journal articles, etc.

6. Polish your outline. Create a document that will let you teach comfortably.

7. Create a checklist of materials you need to prepare or bring. Examples include multimedia materials above, as well as chalk/markers, clickers/notecards, a laptop and power cord, laser pointer, printed lecture notes, etc.

8. Practice!