Engaging Your Students in Their Classroom Learning with the Interactive Lecture

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Participant Outcomes

By the end of this workshop, you will be able to utilize lecture periods more fully and effectively with activities that will:

1) maintain student attention and interest;
2) teach your material more effectively; and
3) increase students’ enjoyment of and satisfaction with your course.
A Lecture Period Should Be a Variety Show.
A Lecture Period Is Like a Puzzle.

Warm-up Activity

Extended Activity #1

Compliance & Comprehension Check

Interactive Lecture with activity breaks

Extended Activity #2

Cool-down Activity

Lecture Break #1

Lecture Break #2
“Puzzle Pieces” of a Lecture Period

• Warm-up activity
• Reading (video, podcast) compliance and comprehension check
• Interactive lecture(s) with some pair/group activities (1-2 or more)
• Extended student activities (1-2)
• Cool-down activity
Warm-up Activities

PURPOSE: To prepare students for a productive class by having them recall/review prior knowledge, readings (video, podcast) due, or last class period.

- Recall prior knowledge - *What’s yours?*
- Reading compliance/comprehension check
- Recall recitation (cold call) → discussion
- Recall writing exercise
Reading Compliance and Comprehension Checks

• Homework handed in
• Daily quizzes
• In-class exercises/activities on readings (accountability: hand in or report out)
• Recitation (v. discussion?)

All must count for “a point” at least.
Recall Writing Exercises

• Free write
• “Mind dump”
• In-class journaling
• Reflection/response
• Answer to short essay question
What a Good Lecture Can Do

• Pique students’ curiosity, inspire motivation
• Model styles of thinking, problem solving
• Give a unique organization to the material
• Adapt high-level material to students’ level
• Add your own viewpoint or related research
• Present a background summary or up-to-date material not currently available in print
What Lecture Can’t Help Students Do

- Examine and possibly change attitudes
- Explore controversial or ambiguous material
- Transfer knowledge to new situations
- Develop critical thinking or problem-solving skills
- Develop/improve writing or speaking skills
- Learn performance or procedural techniques
- Retain knowledge or pursue more after course
Interactive Lecturing

= Lecture with **student-activity breaks** of 2-10 mins. every 10-20 mins.
  - Compensates for short attention spans
  - Increases class attendance, learning, and retention of material
  - Raises your student ratings
Select or design activities to meet 3 objectives:

1. Students *apply/use* new material.
2. Students get *practice* in performing your learning outcomes.
3. You find out how well/much they understand (classroom assessment).
Options for Breaks

• Lecture note review, fill in, elaboration
• Above in pairs
• Periodic writing of most important point(s), with pair or group sharing
• Multiple choice questions (conceptual or applied) – clickers, cards, mobile devices
• Poll of opinions, experiences
• Problem to solve (indiv, pair, group)
• Quick case study (indiv, pair, group)
• Discuss open-ended question (pair, group)
• Come to conclusion/consensus on difficult or complex question/issue (pair, group)
• List examples of key concept
• Correct the error
• Support a statement
• Reorder the steps
• Worksheet/exercise (indiv, pair, group)
• Concept map, diagram, or other visual (indiv, pair, group)
• Question for future test (indiv, pair, group)
• One-sentence (or longer) summary of mini-lecture, video, or demo
• Classroom assessment technique (CAT, e.g., “muddiest point,” “minute paper”)
• Reaction/reflection paragraph or two
For more:

• In-class self-regulated learning activities from this AM’s workshop
• “Effective Teaching Moves for Six Learning Outcomes” (handout)
Break Activity

Think-Pair-Share

Having listened to the first part of this workshop, what is the single most useful thing you’ve learned so far? Share with your neighbor.
Informal In-Class Pairs/Groups

- Great for lecture breaks
- Set up on the fly with nearby neighbors
- Short-term – for class period, exercise
- Easy for you, but must hold groups accountable
How to Manage Pairs/Groups

• Challenging task beyond what students have learned; must require synergy.
• Tight time limit requiring focus
• Specific task w/ product to be group-signed and submitted – OR – call on pairs/groups and members w/in them randomly to report out.
Have Students Recast Material as Visual Representations

Provide examples and practice for students.
Possible Organizations of Material and Visuals

- Concept or mind map - hierarchy
- Flowchart/diagram – sequence of events or operations through time
- Flowchart – causal process through time
- Cycle
- Concept circle diagram
- Compare-and-contrast matrix
Break Activity

What material in one of your courses could be recast as a visual, and what kind of visual? *(Must be material that you have not already recast as a visual.)*
Break Activity

What is discussion (v. recitation)?

For what learning purpose have you used discussion?
Outcomes Discussion Serves Well, Says Research

• Higher-order and critical thinking skills
• Problem-solving skills (e.g., case debriefing)
• Attitude change, mind-broadening
• New applications of knowledge (far transfer)
• Motivation to learn more
Good Discussion Questions Have Multiple Respectable Answers

- Brainstorm
- Compare and contrast
- Make connections
- Evaluate
- Choose and defend a viewpoint or position
- Real disciplinary questions about contradictory findings, anomalies, next best research steps.
For Broad, Active Participation

- Explain civil discourse and set ground rules.
- Ignite the exchange.
- Combat shyness, break down social barriers, and provide “security blankets.”
• Motivate students to prepare to participate.
• Motivate them to pay attention.
• Wait for responses.
• Moderate to maintain momentum.
• Respond honestly to their responses.
Cool-Down Activities

PURPOSE: To promote student review and synthesis of material and tell you how well students are mastering it.

- Review/recall brainstorm
- Recall free write or listing
- Quiz
- “Muddiest point”
- Reflective “minute paper”
Reflective Minute Papers

• Most useful/valuable thing(s) you learned
• Most surprising/unexpected ideas
• Ideas that stand out in your mind
• What helped or hindered your understanding
• Most confusing points, and why
• Idea(s) you can/should put into practice immediately
• How you’d paraphrase key content for HS student
• How material connects with or breaks from your prior knowledge
• How it connects with other courses
Cool-Down Activity

Respond to the minute-paper topic you have the most to say about in writing for the next 1-2 minutes.
What Are Your Take-Aways for Your Lecture Periods?