

Active Learning in the Classroom

Faculty Teaching Workshop

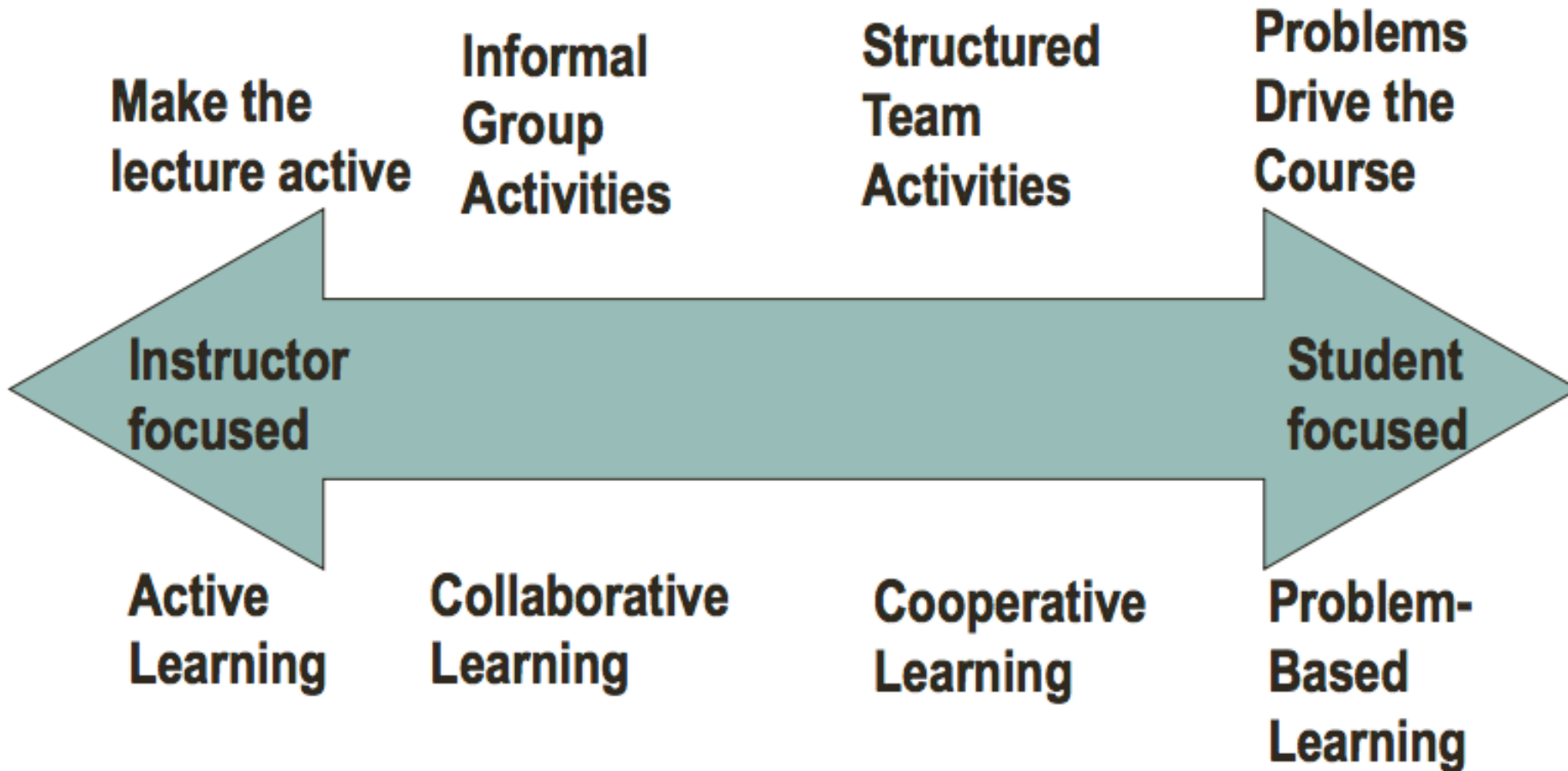
September 22nd, 2017

Active Learning Defined

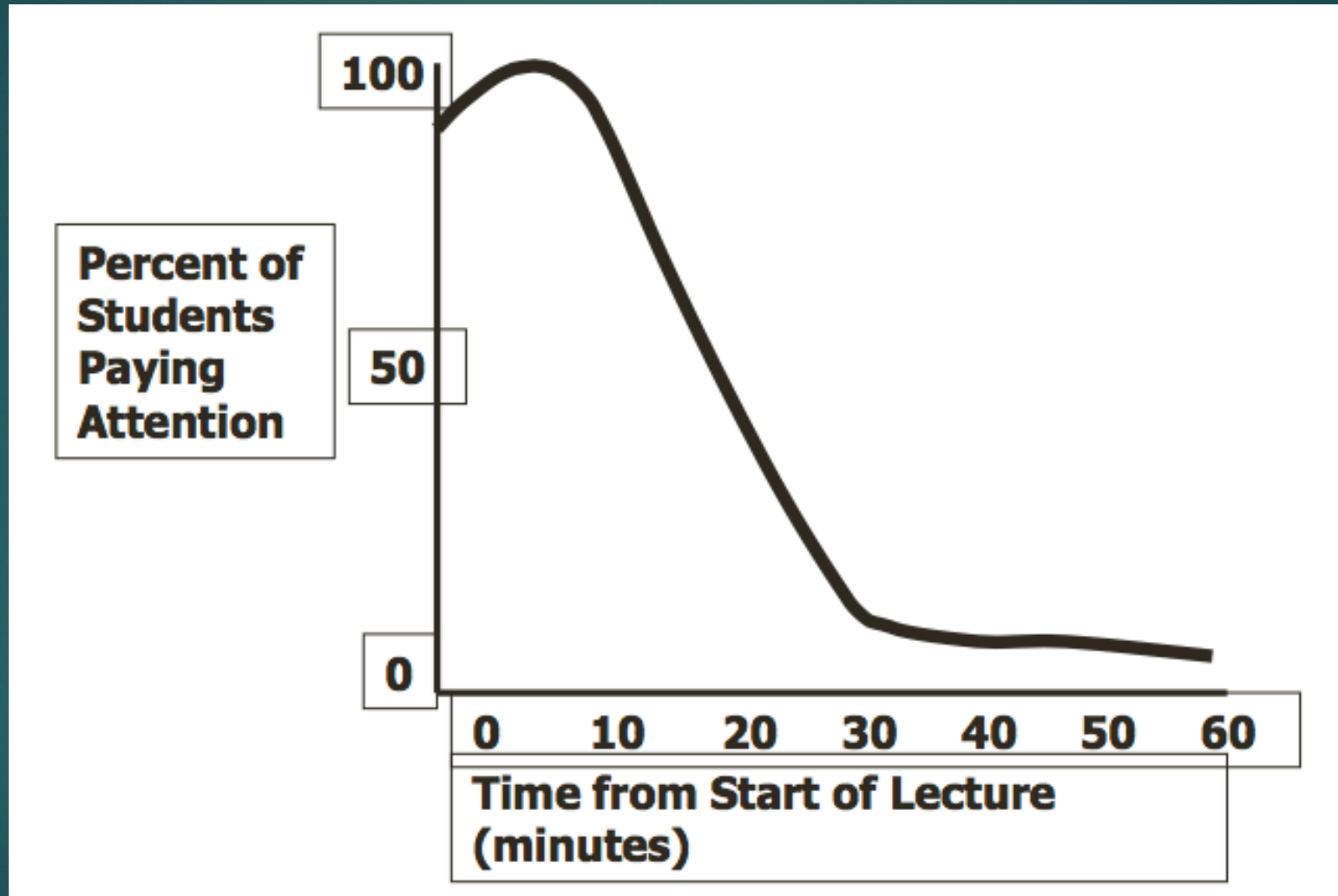
Students doing *anything* in class to *learn* material, *other* than listening to instructor and taking notes.



The Active Learning Continuum



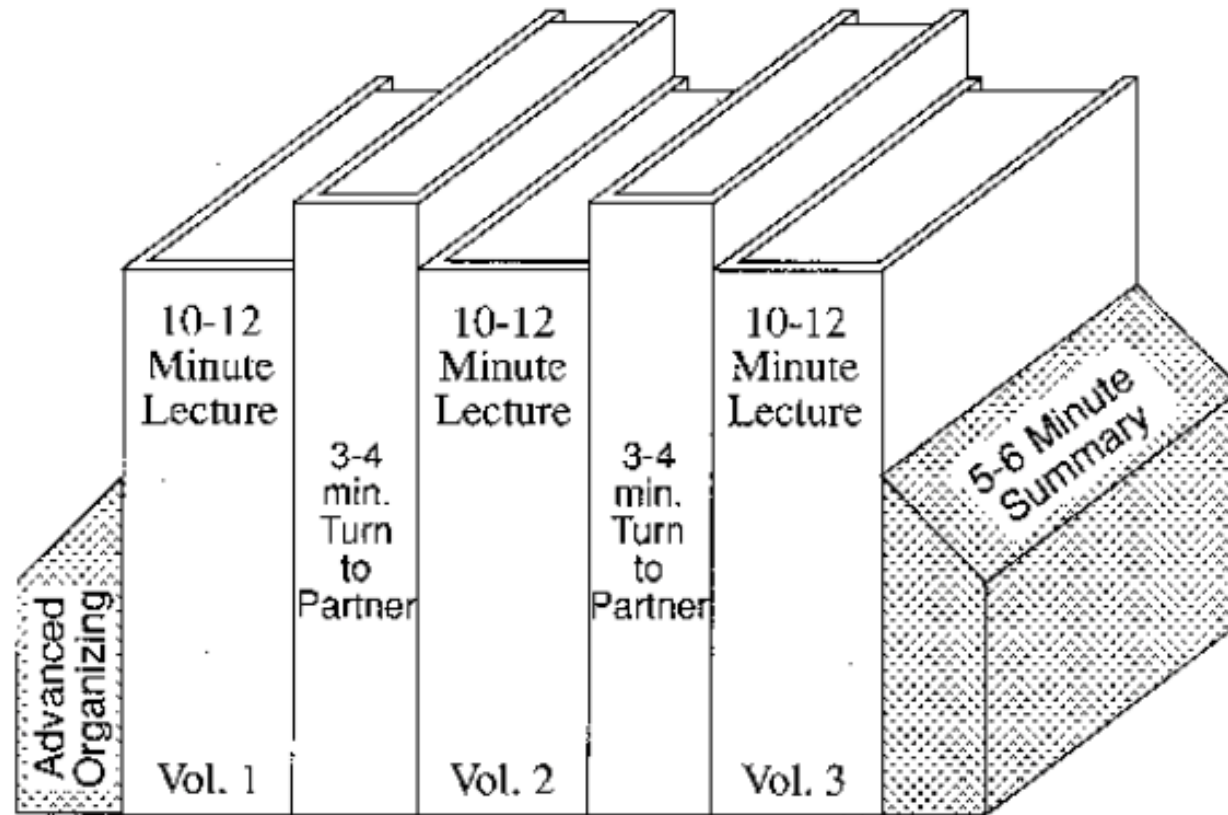
Why Bother?



Prince, M., "Does Active Learning Work? A Review of the Research", J. of Eng. Educat. (2004).

Why Bother?

Book Ends on a Class Session



Thinking Together: Collaborative Learning in the Sciences – Harvard University – Derek Bok Center – www.fas.harvard.edu/~bok_cen/

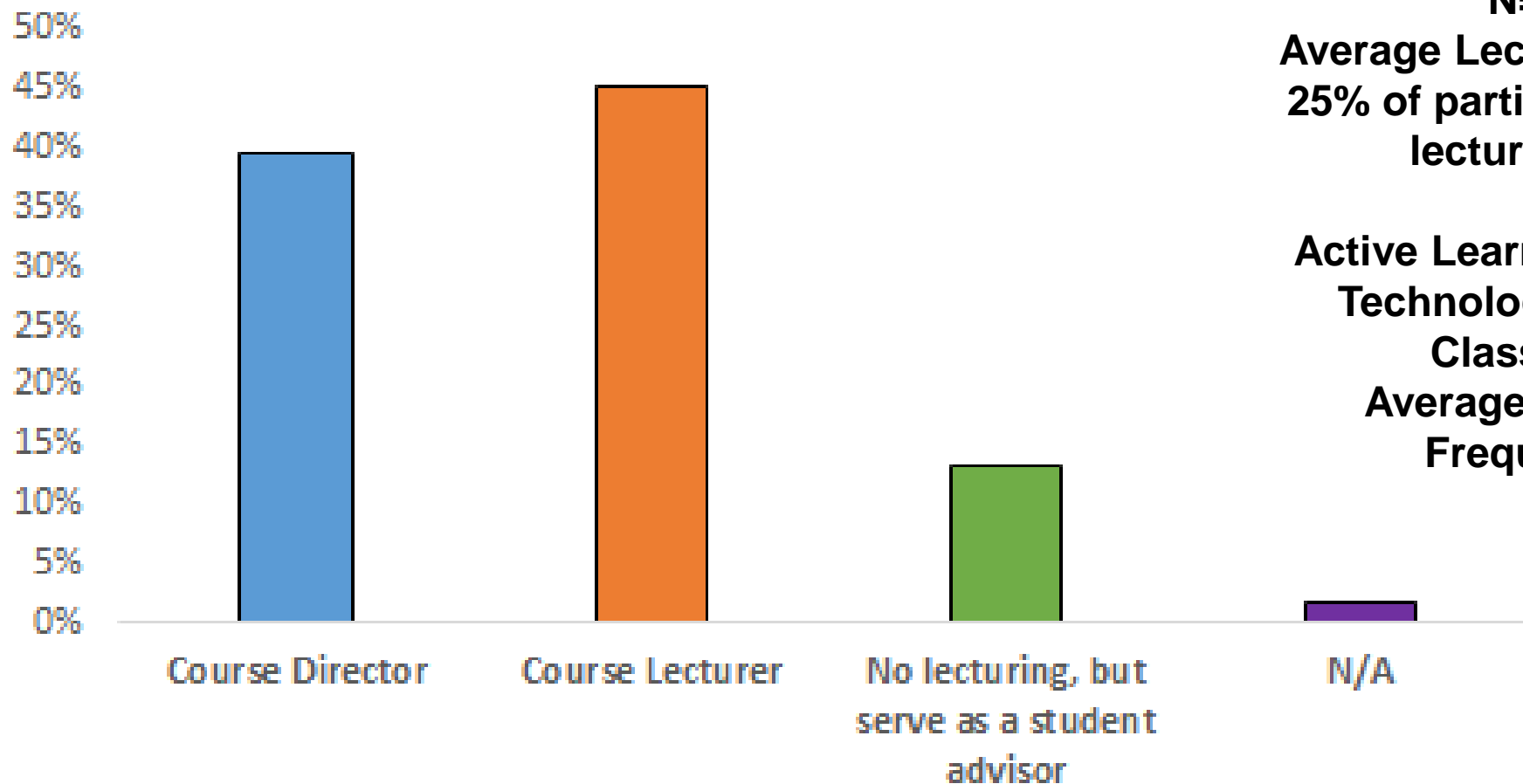
Why Bother?

	With Pause	Without Pause
Short term recall	108 correct facts recalled after lecture	80 correct facts recalled after lecture
Long term recall	Average exam score = 84.9	Average exam score = 76.7

Prince, M., "Does Active Learning Work? A Review of the Research", J. of Eng. Educat. (2004).

Faculty Survey Results

GSBS Faculty Teaching Roles



N=54

Average Lectures/year = 8
25% of participants = >10
lectures/year

Active Learning, Polling,
Technology, Flipped
Classroom
Average = 4 (Very
Frequently)

Workshop Overview

- ▶ Expectations Exercise
- ▶ Learning from a classroom scenario
- ▶ Application of active learning exercises
- ▶ Leading Discussions
- ▶ How to build an Interactive Lecture

Goals:

- Discussion and review of Active Learning Techniques
- Application and Integration Strategies

Expectations Exercise

- ▶ What are your expectations of yourself?
 - ▶ Lecture
 - ▶ Exercises
- ▶ What are your expectations of your students?
- ▶ Do you view Active Learning as a tool or hindrance to your expectations? Please explain your reasoning.
- ▶ **Activity:**
 - ▶ **Write down your response (5 minutes)**
 - ▶ **Discuss your responses within your group (5 minutes)**
 - ▶ **Select a spokesperson to communicate your main discussion points**



Classroom Scenario

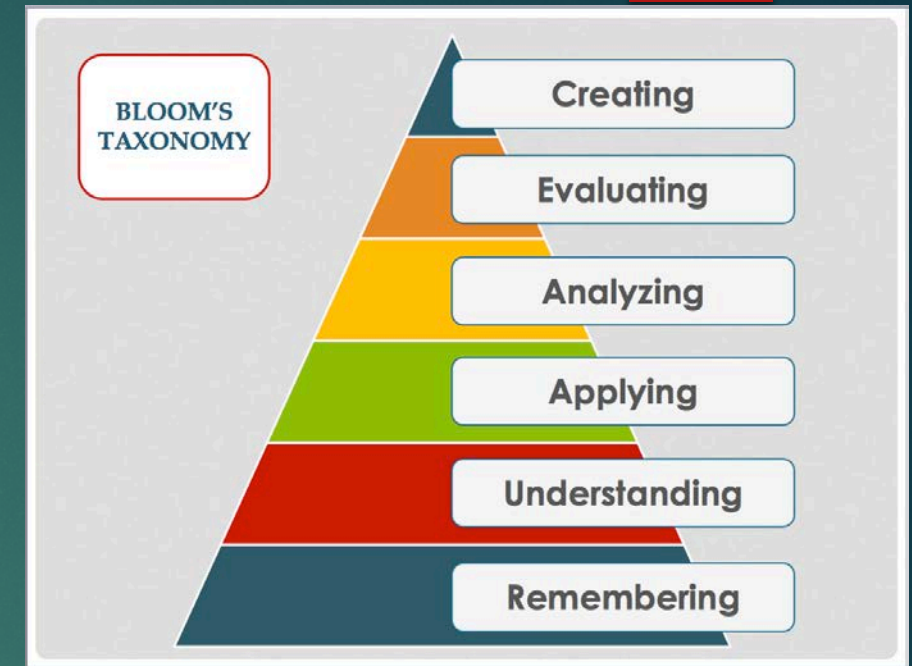


Feedback

- ▶ Positives?
- ▶ Negatives?
- ▶ What would you do differently/same?

Preparation for Active Learning

- ▶ Critical thinking
- ▶ Individual responsibility for learning
- ▶ Involvement in open-ended activities
- ▶ Organization of learning activities
- ▶ Group activities:
 - ▶ Bloom's taxonomy
 - ▶ Challenge assumptions/suggest alternative ways of approaching problems



From the Trenches: Active Learning in the Classroom

Clicker Question:

- ▶ What is your biggest frustration with Active Learning Techniques?
 - ▶ A) They never work
 - ▶ B) Too much preparation
 - ▶ C) Hard to integrate into lecture time
 - ▶ D) All of these
 - ▶ E) Other

Common Active Learning Problems

- ▶ Plunge into the active learning exercise without any explanation
- ▶ Expect all students to eagerly get into groups the first time you ask
- ▶ Trivial activities
- ▶ Lengthy activities with too many steps/issues to address
- ▶ Call for volunteers after every activity
- ▶ Fall into a predictable routine

From the Trenches: Active Learning in the Classroom

Clicker Question:

- ▶ What is the most positive outcome you have experienced with Active Learning Techniques?
 - ▶ A) Increased attention and retention
 - ▶ B) Deeper comprehension
 - ▶ C) Pointed questions that aided evaluation of collective understanding
 - ▶ D) All of these
 - ▶ E) Other

Group Discussions

- ▶ Strategy
- ▶ Questions to begin the process
- ▶ Leading by removing barriers
- ▶ Arriving at a logical conclusion



Criteria of Effective Lectures

- ▶ Organization
- ▶ Language
- ▶ Strategy
- ▶ Diversity
- ▶ Audiovisuals
- ▶ Time Management
- ▶ Active Inquiry
- ▶ Delivery



Creating Effective Presentations: Beginning

- ▶ **Learning Outcome** - What would you like the students to be able to do/know by the end of your presentation?
 - ▶ Share outcome/goal with your students including how & why it's important
- ▶ **Anticipatory set** - something to get your students thinking or draw them into the topic
 - ▶ Overview, anecdote, question, pose problem/case study, demonstration, quotation, relevant fact/statistic

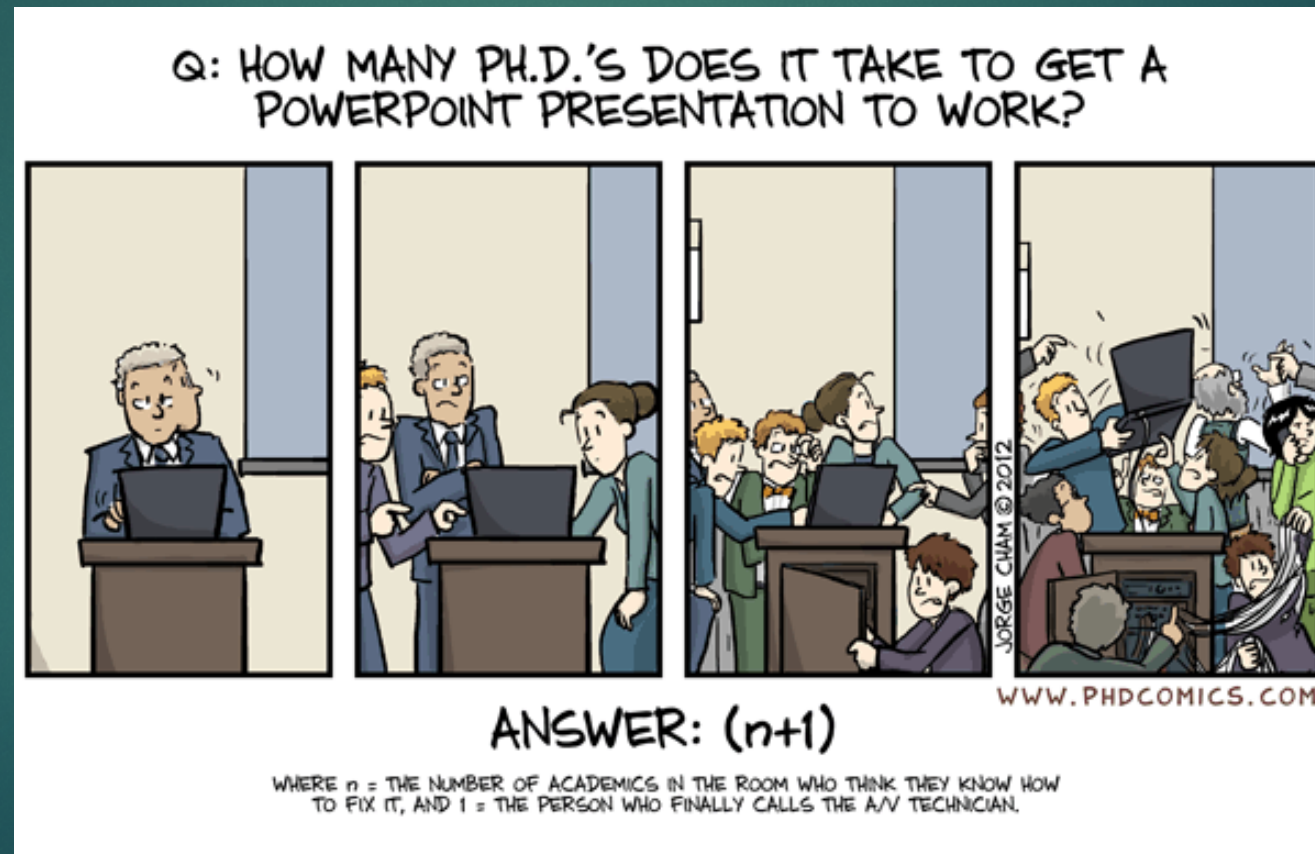
Creating Effective Presentations: Delivery

- ▶ **First chunk of information** - (10-15 minutes)
 - ▶ What are your Main points?
- ▶ **Active processing/participation activity** - 5-10 minutes
 - ▶ What short activity could be done that would engage students in applying the concept being covered?
 - ▶ Think-Pair-Share or another activity or problem
 - ▶ This provides both you and students with an opportunity to track whether students are understanding
- ▶ **Second chunk of information** - 10-15 minutes
 - ▶ What are your Main points?
- ▶ **Second Active processing/participation activity** - 5-10 minutes
- ▶ **Third chunk of information** - 10-15 minutes
 - ▶ What are your Main points?
- ▶ **Third Active processing/participation activity** - 5-10 minutes

Creating Effective Presentations: Ending

ENDING YOUR PRESENTATION

- ▶ Wrap-Up
- ▶ Evaluation of student content mastery



Faculty Teaching Resources

Teaching Resources - Faculty

https://gsbs.uth.edu/faculty/faculty-resources/teaching-resources

Teaching Resources

HOME / FACULTY / FACULTY RESOURCES / TEACHING RESOURCES

- Faculty Resources
- Faculty Meeting Agenda
- Teaching Resources
- Standing Committees
- Previous Meetings
- Faculty Bylaws
- Faculty Awards
- Core Tenets
- Former Faculty Presidents

QUICK LINKS

Apply Now

ACADEMIC INFORMATION

Active Learning

"The process of having students engage in some activity that forces them to reflect upon ideas and how they are using those ideas. Requiring students to regularly assess their own degree of understanding and skill at handling concepts or problems in a particular discipline. The attainment of knowledge by participating or contributing. The process of keeping students mentally, and often physically, active in their learning through activities that involve them in gathering information, thinking and problem solving." ~The Greenwood Dictionary of Education

[Active Learning Strategies](#)

[Active Learning Strategies in Face-to-Face Courses](#)

[Using Graphic Organizers](#)

Creating Effective Presentations

[Outcomes Assessment & Tasks](#)

[Creating Effective Presentations Template](#)

Future Students Current Students Faculty Alumni

2:17 PM 9/20/2017

Upcoming Workshops

Clicker Question:

- ▶ What would you like to see in future workshops?
 - ▶ A) The Science of Learning
 - ▶ B) Classroom Management
 - ▶ C) Communication Skills
 - ▶ D) Problem Solving and Comprehension
 - ▶ E) Other

Thank you!

Please feel free to contact us:

▶ Eric Swindell

713-500-9881

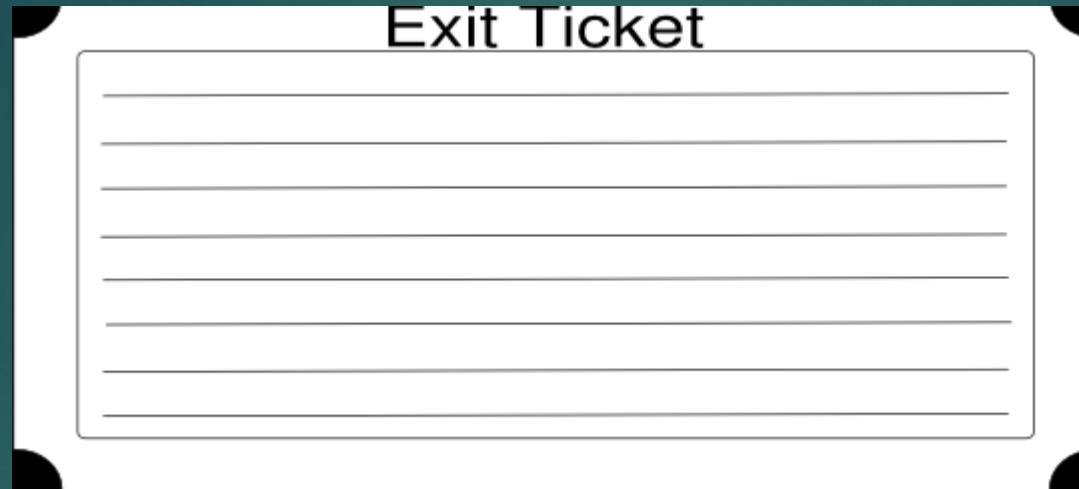
Eric.C.Swindell@uth.tmc.edu

▶ Lindsey Minter

713-500-9865

Lindsey.C.Minter@uth.tmc.edu

Exit Ticket

An image of a white rectangular form titled "Exit Ticket" at the top center. The form has a double-line border and contains ten horizontal lines for writing. The form is set against a dark teal background with black corner markers at the top-left, top-right, and bottom-left corners.

- ▶ What information was the most useful?
- ▶ What information was the least useful?
- ▶ Are there elements that left you with questions? If so, what were they?