

INTERACTIVE LECTURING



Interactive lecturing is a type of active learning that is easy to adapt to standard class lectures. Thoughtfully breaking up the lecture with short, low-key activities will help students focus on the material longer, gives students an opportunity to check what they do and do not know, and provides you with information about the students' retention—all of which numerous studies confirm will lead to better long-term retention.

Continue reading for the nuts and bolts of delivering an active lecture in every class.

Engagement



Keep those wheels turning! The average attention space is only about 15-20 minutes, so pausing every so often to check in with students will help keep students mindfully engaged in the class topic for the duration of the 50+ minute class time.

Best Practices:

- ◇ **Structured, strategic breaks**—Review your lecture and look for natural break points. Use these break points to guide and develop the short activity.
- ◇ **Plan an activity at least every 20 minutes**—more often is fine too! These don't have to be long— even a few poll questions will get students actively participating.
- ◇ **Use pre and post check-ins**—Use a pre-check to see what students already know about the topic. If they don't know much, getting questions wrong at the start of class will actually help them focus on what they still need to learn. Use a post check-in to recheck class objectives, solidify important concepts, and check for confusion. (Tools to do this below!)
- ◇ **Use a variety of tools and activities**—Different learning objective will need to be supported in a variety of ways. There are many different tools that students can use to quickly interact with content—more on that below!

Performance Improvement



Education research has shown that interacting with course material as much as possible is the best way to learn and retain the information. Even short interactions in an interactive lecture will give students more practice with application and recall, helping to solidify the concepts.

Knowledge Construction Needs:

- ◇ **Interaction with the Material**—Recall, getting things wrong, application to self, identifying patterns, discussing the material, practicing etc., are all ways to support long-term skills and memory.
- ◇ **Chunking**—Pausing every so often to reinforce a concept also **helps students “chunk”** the material more accurately and effectively which helps alleviate information overload. This allows them to retain more information than they might otherwise be able to.
- ◇ **Feedback Opportunities**—Thinking you know something and demonstrating you know something are very different! To avoid illusions of knowing, students need regular, ongoing feedback (self-guided, peer-guided or instructor-guided).
- ◇ **Learning Communities**—Working alongside other students to solve problems, or even just the common experience of answering poll questions, supports building a learning community. Learning communities play a large role in how one learns and can be critically important in courses where things like knowledge construction, rhetoric, collaboration, etc. are major learning outcomes.

Quick Group Check-in



Now, what to do in those 10 to 20 minute pause breaks? Here are some ideas!

Ideas:

- ◇ **Polls**—[PollEverywhere](#) (Emory licensed) has a variety of questions formats that you can use to do a knowledge check at the start, middle, or end of class. Polls can be saved and reused so both you and your students can see their progress in real time! Tip: Ask questions that students often struggle with. This will let you see how they are doing on difficult topics throughout the class, and students can see what they need to continue to work on. Bonus– getting things wrong will actually help with getting things right later on!
- ◇ **Annotations**—In Zoom when sharing your screen, students can write, draw, etc. on slides throughout a presentation.
- ◇ **Real-time Chat**—Build in “chat breaks” every so often. Rather than periodically pausing and saying “are there any questions?”, provide students with a forum, either the chat in Zoom, Slack, or chat in Canvas, to type their questions. This allows you to gather more questions and see where common concerns are. This is especially useful in a large class because it gives everyone a chance to ask their question.

Short Discussion Breaks



Depending on your topic, longer breaks might be necessary to give students a little more time to think about an issue or work out a problem. Here are some ways to manage that without losing too much class time.

Ideas:

- ◇ **Think-Pair-Share**—Ask a question and ask students to write down their response in 1-2 minutes (Think) - Have them find a partner and exchange ideas (Pair) - Have groups report out to the class what their idea were (Share).
- ◇ **Pose a Scenario**—Based on the topic you just covered, give students a scenario to consider and have them work in pairs or small teams (3-5) to present a solution in 5 minutes. Use breakout rooms in Zoom if you are online.

Independent Reflections



Giving students time to reflect on the lesson and any questions, new insights, or points of confusion they may have is a great way to give them a “brain break” and reinforce concepts. In class you could use notecards, notebooks etc. Both online or in class you could use a poll question, a chat, a survey, discussion board, etc.

Ideas:

- ◇ **1-Minute Paper**—At the start or end of class, give students one minute to write what they know about a topic, answer a question, or make connections from the material to their own life and interests (“connection to self”)
- ◇ **I like, I wish, I wonder**— At the end of class, have students write one thing they liked/learned in class, one thing they wish they knew more about, and one question that they still wonder about (or you can make your own version of this—be creative!)
- ◇ **Exit Ticket** — This can take the form of just about anything—note card, discussion post, survey, poll, chat etc. —but it’s a quick way to get information from students about class that day.

Polls & Surveys



Use polls or surveys to quick check in and take the pulse of a class— how are they feeling? What do they know? Etc.

- ◇ **PollEverywhere**—Emory has a university license for this tool so you have unlimited access. There are a variety of question types, and you can reuse and track questions and responses over time.
- ◇ **Kahoot** and **Socrative** have free options.
- ◇ **Zoom** has a Poll function—limited to multiple choice or true/false questions.
- ◇ **Canvas** has a Survey function.

Shared Docs & Whiteboard

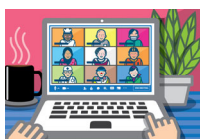


Use shared documents or whiteboards for group work, to facilitate discussions, or get quick answers from a large group. Save the collaborations and post in Canvas for future use!

Programs and Apps:

- ◇ **Microsoft 360**—share Word, PPT, Excel, etc.
- ◇ **Google Drive**—Google Docs/Slides/Sheets/Jamboard (an electronic whiteboard)
- ◇ **Miro**—Collaborative white board with a lot of functionality, including audio! Get up to 3 boards for free.
- ◇ **Padlet** — An online bulletin board—collect and share ideas, resources, images in real time or asynchronously

Zoom



Zoom has several tools that allow for student interaction.

Activities

- ◇ **Reactions**—Quickly as Y/N questions, use emojis to project ideas and feelings
- ◇ **Annotations**—Students can write on your slides to brainstorm, label, answer questions, etc. The annotations need to be erased (i.e. it doesn't stay on the slide), so if you want to keep the answers, either record in Zoom or use shared slides (see above for options)
- ◇ **Chat**—You can turn the chat on and off through the “security” function. When you are ready, turn the chat on and have students respond to a question, exchange ideas, ask a question, etc.
- ◇ **Poll**—Gather quick input through the Poll tool. This has to be set up ahead of time, so one easy way to use this function is to simply create an “empty” question with A/B/C/D options. You can then provide the specific prompts on the slides or in the chat and reuse this Zoom Poll with any multiple-choice question.