

Editors Note: If you teach online or a hybrid course, make your lecture interactive using Office Mix (free add-in for PowerPoint), forums, and other tools. Contact us in the FDC for more assistance.

Designing Interactive Lectures that Make the Most of Students' Attention Spans

We've all been there. Standing in front of the classroom, diligently "covering" the day's content as we watch our students' eyes glaze over. Or calling on a student to respond to a question and realizing too late that she hasn't been paying attention. Most experienced teachers would agree that it has become quite difficult to hold students' attention, especially while lecturing.

Lecture remains common in today's college classrooms because it allows course content to be shared with a large audience and in a timely manner, it enables teachers to control which content is elaborated and which content is de-emphasized, and it engages students in real-time, oral delivery of information that creates a multi-modal learning experience when paired with prior reading and simultaneous notetaking and discussion (Charlton, 2006; Kelly, 2017). Although lecture should never be used exclusively, it can be used effectively when teachers understand their students' attention spans.

A study by Bunce, Flens, and Neiles (2010) used clickers to monitor college students' attention spans during a chemistry lecture. These researchers found that lapses in college students' attention typically last less than one minute and occur roughly 30 seconds, 5.5 minutes, 13.5 minutes, and 21.5 minutes into a lecture. After 22 minutes, students' attention lapses about every two minutes (Briggs, 2014). Knowing approximately when students are likely to "zone out," teachers can design their lectures to accommodate students' attention spans with three simple steps:

- **During the first 1 or 2 minutes:** Open the lecture with a brief "warm up" activity, such as a multiple choice question, a problem, or a short story or example that reviews previous content or previews current content.
- **Around the 5 minute and 13 minute marks:** Stop lecturing and engage students in a brief, interactive activity such as:
 - **Pause-and-think:** Throughout the lecture, pause every 5-10 minutes to pose a question or assign a simple task (e.g., Think of a first-hand example of sociocultural learning theory from your childhood, and share it with the person next to you.) Allow 2-3 minutes for students to share their examples with a classmate – and one or two examples with the entire class – before continuing with the lecture.
 - **Think-write-discuss:** In preparation for the lecture, prepare three questions: 1) a motivational question, 2) a question seeking clarification about a specific point or concept, and 3) a reflective question such as, what is the most interesting thing you learned today? Or, what aspect of this topic is still unclear for you? Open the lecture with the first question, pose the second question mid-lecture, and close with the third question. Direct students to respond to each question in writing (No talking for two minutes!) before sharing their responses with a classmate. Then, continue the lecture. Collect the student responses at the end of the class period to use as an informal assessment.

- Collaborate-and-apply: Before the lecture begins, assign students to small working groups. After lecturing on a specific point or concept for up to 13 minutes, assign a lecture-specific question, problem, or task to each group. Allow 5-20 minutes for students to discuss, solve, or complete their in-class assignment and share their outcomes and/or processes with the class before continuing the lecture. This option works particularly well with extended group projects that require step-by-step procedures and close supervision.
- **Around the 21 minute mark**: End the lecture.

Using one or more interactive lecture strategies such as these, the 21-minute lecture can be “stretched” across 40 to 50 minutes of class time while student attention spans remain strong and the teacher has more opportunities to adjust pacing, content, and emphasis based on student responses. The ideas shared here are adapted from Schurr and Forte (2014, pp. 170-171). For more ideas on how to make lectures interactive, see “Lecturing Effectively” by the DePaul Teaching Commons (2001-2017).

Resources:

Briggs, S. (2014, June 28). The science of attention: How to capture and hold the attention of easily distracted students. Retrieved from <http://www.opencolleges.edu.au/informed/features/30-tricks-for-capturing-students-attention/>

Charlton, B. G. (2006). Lectures are an effective teaching method because they exploit human evolved ‘human nature’ to improve learning. Retrieved from <https://www.hedweb.com/bgcharlton/ed-lect.html>

DePaul Teaching Commons (2001-2017). Lecturing effectively. Retrieved from <https://resources.depaul.edu/teaching-commons/teaching-guides/instructional-methods/Pages/lecturing-effectively.aspx>

Kelly, M. (2017, February 21). Lecture pros and cons. Retrieved from <https://www.thoughtco.com/lecture-pros-and-cons-8037>

Schurr, S., & Forte, I. (2014). *The definitive middle school guide, revised edition*. Chicago, IL; Incentive Publications.

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