

Active Learning for Lecturers*: Choose the Right Level

Are you looking to increase the effectiveness of your lectures? Dip your toes into active learning with some easy modifications! Ready to level up? Keep reading!

The Power of Active Learning

The goal of active learning is to make learning interactive rather than passive. Research* has overwhelmingly proven the effectiveness of this strategy. Case in point: Students' grades go up by one full letter grade on end-of-unit exams – even months later – if they are formatively quizzed throughout the unit. This is one simple way active learning increases student achievement of outcomes.

Active Learning Level 1: Talk 10–Pause 2

Prep. Time: None – just be quiet!

What to Do: Lecture for approximately 10 minutes. Then be quiet for 1–2 before resuming. Repeat. That's it!

How It Works: The average attention span is less than 15 minutes. This break allows for attention reset. Bonus: learners come to expect these breaks and defer attention lapses (such as texting) until the next break.

Active Learning Level 2: Question Everything

Prep. Time: Minimal

What to Do: Use questions to guide student learning and adjust your teaching before, during, and after the lecture. Formatively test what was learned. Ask students to provide examples; prompt students to pose questions. *This strategy can be combined with 10-2 (Level 1).*

How It Works:

- *Before* the lecture, questions focus attention, activate prior knowledge, and provide structure.
- *During* the lecture, questions solidify what was and wasn't understood in the material just covered.
- *After* the lecture, questions review what was learned, close the loop, and help students recognize the key areas to study.

Active Learning Level 3: Safety in Numbers

Prep. Time: 30+ min.

What to Do: Use Clickers or polling software (i.e., PollEverywhere) to gauge knowledge and provide teachable moments. This can be done within a slide presentation or independently, and students can usually use smart phones instead of clickers. *This strategy can be combined with Question Everything (Level 2).*

How It Works: Polling provides an embarrassment-free zone, hence increasing engagement from those who are less likely to speak up. It helps students recognize what they don't know and identify key areas to study. It is also a safe way to support discussion of ethical or controversial topics. Some tools offer points-tracking, which may increase attendance levels and provide more summative data.

Interested in learning more? Reach out to SMHS Education Resources instructional designers (777-4272).

Active Learning Level 4: Breakout

Prep. Time: 60+ min.

What to Do: Break students out into groups (ideally, fewer than 8 per group). Each group works on a complex question, portion of a case, or subset of a project. Come back together as a large group, either in the same session or a subsequent one. Each group shares and fields questions about its portion of the activity. (See additional resources on *Fishbowl* and *Jigsaw* activities; these are types of breakout sessions!)

How It Works: Components of many systems and concepts are too big to understand all at once. Breakouts chunk items down into “bite-size” pieces – one for each group. Each group takes ownership of its portion and masters it well enough to educate others.

Active Learning Level 5: The Flipped Classroom

Prep Time: Varies, but be conservative; this is a redesign of materials and teaching strategies!

What to Do: Requires pre preparation and generation of any materials needed, including recorded lectures. Use live time to focus on outcomes students cannot achieve independently.

How It Works: This strategy places value on your expertise rather than your ability to disseminate facts. Facts and concepts normally taught during lecture are instead learned independently by students outside of class. At class time, students apply this knowledge to activities such as discussions, breakouts (*Level 4*), labs, simulations, or other projects. (For tips on how to ensure students prepare, see additional resources on individual and group quizzing, also known as “IRAT” and “GRAT.”)

Details, Evidence, and References

*This handout is based on *Active Learning for Lectures: Choosing the Right Level*, a presentation by Dr. Richard Van Eck, Associate Dean for Teaching & Learning, SMHS. For details, references, and more insight into the instructional design theories and evidence-based practices behind each of the above strategies, view the complete presentation and access the slides at the following link:

Advancing Educational Innovation and Scholarship (AEIS) Workshop
<https://med.und.edu/education-resources/aeis.html#AEIS3>

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