

Strategies for Covering Content Series

PART 1: Covering Content More Effectively During Lecture

Helping students learn and internalize content knowledge is a complex task that requires instructors to be both proactive and creative. Ambrose et al. (2010) define learning as "a *process* that leads to *change*, which occurs as a result of *experience* [emphasis original] and increases the potential for improved performance and future learning (adapted from Mayer, 2002)" (p. 3). Furthermore, the authors emphasize that learning is something that students must actively do themselves, not something that they passively receive from an instructor (Ambrose et al., 2010). Despite this, traditional lecture is still likely the most widely used form of content delivery in colleges and universities (Nilson, 2010). Although lecture certainly has its place in today's classrooms, there are other strategies can be used to engage students while still promoting learning. Varying your instructional strategy also has benefits for low-income and first-generation students, who may feel isolated when more traditional pedagogies are used exclusively (Engle & Tinto, 2008).

Getting more creative with lecture through active learning activities

Lecture can be an efficient way to communicate information to students, especially when paired with active learning activities (Gregory, 2013; Smith & Cardaciotto, 2011). These activities can either be individual or collaborative. Collaborative learning has been found to be quite effective in a variety of class types and subjects (Barkley, Major, & Cross, 2014; Loes, An, Saichaie, & Pascarella, 2017). Here are a few strategies for pairing lecture with active and collaborative learning activities:

Strategies	Activities & Descriptions
Break up your lecture with discussion activities	Think/write-pair-share: For this activity, the instructor asks the class a question, and then gives students a few minutes to think about or write down a response. Students then pair up and share their ideas
	Send-a-problem: For this activity, students break up into groups. Each group is given a problem to solve together. After coming up with a solution, the group then passes the problem and their solution to another group. After several groups have attempted to solve the problem, the groups must work together to analyze and synthesize the responses to the problem and report the solution to the class.
	<u>Buzz groups:</u> In this activity, students form teams of 4-6 and respond informally to a series of course-related questions. One useful variation on this activity is to assign students roles in the group (e.g., recorder, time-keeper, presenter, etc.).
	Active listening: Ambrose et al. (2010) suggest building active listening competency by asking students to "paraphrase what someone has said, followed up by a series of questions as to whether their perception was inaccurate or incomplete" (p. 186). The authors also suggest modeling this technique by paraphrasing your students responses in classroom discussions.
Assess students' understanding	<u>Clicker quizzes:</u> Short, in-class quizzes using clickers can be used to assess in the moment how much students' are understanding the lecture and whether you may need to go over a topic. For more on clickers at UC Davis, visit <u>EdTech</u> <u>Commons</u> .
	Minute papers: These short writing activities, where students spend a few minutes writing short responses to questions meant to gauge their understanding of a class concept, can also provide you with an opportunity to assess students' understanding of content in a more holistic way than quizzes.

Implement reciprocal teaching activities

<u>Note-Taking Pairs:</u> As the name suggests, this activity works by having students take joint notes. This allows students to capture more material in their notes, likely improving both partners individual notes.

<u>Jigsaw:</u> "Students work in small groups to develop knowledge about a given topic and to formulate effective ways of teaching it to others. These expert groups then break up, and students go to new Jigsaw groups" (Barkley, Major, & Cross, 2014, p. 212).

<u>Group Investigation:</u> In groups, students are assigned a sub-topic in the class that they are in charge of researching and then creating a final product to teach the class about their sub-topic.

Additional resources:

For more strategies and suggestions on pairing active learning activities with lecture, see our resource series titled "Activating Your Lecture."

Citation

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References

- Ambrose, S., Bridges, M., DiPietro, M., Lovett, M., & Norman, M. (2010). *How learning works Seven research-based principles for smart teaching.* San Francisco, CA: Jossey-Bass.
- Barkley, E. F., Major, C. H., & Cross, K. P. (2014). *Collaborative learning techniques: A handbook for college faculty*. San Francisco, CA: Jossey-Bass.
- Engle, J., & Tinto, V. (2008). Moving beyond access: College success for low-income, first-generation students. *Pell Institute for the Study of Opportunity in Higher Education*. Retrieved from http://files.eric.ed.gov/fulltext/ED504448.pdf
- Gregory, J. L. (2013). Lecture is not a dirty word: How to use active lecture to increase student engagement. *International Journal of Higher Education*, *2*(4), 116-122.
- Loes, C. N., An, B. P., Saichaie, K., & Pascarella, E. T. (2017). Does Collaborative Learning Influence Persistence to the Second Year of College?. The Journal of Higher Education, 88(1), 62-84.
- Nilson, L. B. (2010). Teaching at its best: A research-based resource for college instructors. San Francisco, CA: Jossey-Bass.
- Smith, C. V., & Cardaciotto, L. (2011). Is active learning like broccoli? Student perceptions of active learning in large lecture classes. *Journal of the Scholarship of Teaching and Learning*, 11(1), 53-61.