

## Planning Engaging Online Lectures

The most important way to ensure that students engage with and learn from any lecture is to provide a structure that guides them through not just the content of the lecture, but also through the development of their thinking about the content.

There are a few key strategies that can help us plan and implement lectures that will be engaging for students and will help them learn our content.

**1. Chunk lectures into 10-15 minute segments.** When students are primarily listening for long periods of time, they can quickly become passive and ultimately distracted. If we want to ensure that students engage and remain attentive, we need to pause frequently and have them engage in rigorous cognitive work that builds on the content of the lecture.

**2. Embed simple but structured student work around these short segments.** Students need guidance to help them process and begin to integrate the concepts or skills that your lecture communicates. The tasks you give students can be informal or formal, ungraded or graded, or some combination of the two. Ideally, you want to incorporate student work at multiple points of a lecture, but even including just one pause between two short chunks of lecture can engage students and help them work with the content. You might ask students to do some work before your lecture, during your lecture, or after your lecture.

- Requiring students to do work **before they watch or listen to lecture** helps them activate their current understanding so that they can prepare to trace the development of their thinking as they learn more. This also helps orient them to the lecture that is coming because it gives them a reason to listen to what the lecture will reveal and prepares them to make connections across ideas. You might ask students to attack a problem that you pose at the beginning of your lecture and then promise them that the solution will be embedded in the lecture. Now your lecture will answer the questions that have been raised for them as they attempted that initial problem.
- Requiring students to pause and do work **while they watch or listen to lecture** helps them begin to integrate new ways of thinking into their current understanding. This work can help students reflect on how their thinking is changing, put new ideas to use right away, make connections between what has come before and what will come next, and push student thinking forward, requiring them to anticipate what will come next.
- Requiring students to do work **after they watch or listen to lecture** helps them begin to place what they've learned into the broader context of the work they will continue doing in the course. This work will help students to summarize and connect big ideas and plan for how they will use those ideas in upcoming course work.

**3. Interact with your students.** In a face-to-face classroom, we can move around the room as we lecture and we often create a feeling of interaction when we throw out a question to the class or when we respond to students' body language or invite their the questions. This interactive feeling can get lost in the online environment. Asking students to respond to a thinking or writing prompt can help them feel that they are listening to your lecture for a reason—to use that lecture to solve a real problem or tackle a challenge. Make sure that students have an opportunity to receive some feedback from you—either individually or as a group—so that they can begin to assess their new thinking.

Now that you have read and considered these key strategies, review the following examples to see what they look like in action.

## Examples of strategies for making lectures more engaging

*Note:* These strategies are presented as sequences, but many of them are adaptable so that you can have students do work fewer times (i.e., only before lecture, during lecture, or at the end of lecture). You might choose to collect this work to give students credit, but you don't have to grade it carefully. Instead you might choose to review it so that you can see what they are beginning to understand more clearly and also note any ongoing points of confusion so that you can address those in upcoming classes.

### **Minute paper**<sup>i</sup>

This strategy is designed to help students identify and articulate the most important ideas and begin to make connections between their reading and lectures. (*Note: This strategy does not have to be done in a sequence: it can also be used just at the beginning or end of class to help students articulate the most important ideas they have learned from reading or lecture.*)

1. Before the lecture begins, ask students to write down their response to this question: What is the most important thing I learned from the reading or homework for today's class? In a synchronous class, you might ask students to share some of their ideas verbally or in a chat. In an asynchronous class, you might ask students to put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.
2. During the lecture, pause at least once (you might pause two or three times) and give students a minute to re-read their initial responses and make notes on the same paper about the most important things they have learned so far in the lecture and how that connects with what they learned from the reading. In a synchronous class, you might ask students to share some of their ideas verbally or in a chat. In an asynchronous class, you might ask students to put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.
3. At the end of the lecture, have students reflect back on all their notes and write down their response to these questions: (1) What is the most important thing I learned in today's class? (2) How does that connect to the important things I learned from the reading? (3) How will I use what I've learned to help me on the upcoming class assignment/test/project? You might have students put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.

### **Pause Strategy: Muddiest point**<sup>ii</sup>

This strategy is designed to have students articulate initial points of confusion and then trace their thinking as their understanding changes. (*Note: This strategy does not have to be done in a sequence: it can also be used just at the beginning or end of class to help students articulate points of confusion.*)

1. Before the lecture begins, give students 2-3 minutes to write in response to one of the following prompts:
  - What are the three muddiest (i.e., most confusing) points from the reading or homework you completed for today's class?
  - What are three questions from the reading or homework that you would like to have answered in today's class?

In a synchronous class, you might ask students to share some of their ideas verbally or in a chat. In an asynchronous class, you might ask students to put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.

2. During the lecture, pause at least once (though you might pause two or three times) and give students a minute to make notes on the same paper about what points are becoming clearer for them, what questions are being answered, and what confusions still remain. In a synchronous class, you might ask students to share some of their ideas verbally or in a chat. In an asynchronous class, you might ask students to put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.

3. At the end of the lecture, ask students to reflect back on their muddiest points and write what they understand now that they didn't understand before and also to note if any of these points are still "muddy" or confusing. You might have students put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.

### **K-W-L Chart**<sup>iii</sup>

This strategy is designed to help students assess their current understanding of the topics or content that will be covered in a lecture, determine what they want to know, and reflect on what they learn during the lecture. *(Note: This strategy works best as a sequence with students working at least before and at the end of lecture.)*

1. Before the lecture begins, students either receive a copy of or make their own K-W-L chart that looks like this:

<b>Topic/Concept</b>	<b>K: What you <i>Know</i></b>	<b>W: What you <i>Want to know</i></b>	<b>L: What you <i>Learned</i></b>

Give students the list of topics or concepts that will be presented and give them 2-3 minutes to create a row for each concept and also fill out the K and W columns for each concept, noting what they know and what they want to know.

2. During the lecture, pause at least once (though you might pause two or three times) and give students 2-3 minutes to begin making notes in the L column (what they have learned).

3. At the end of the lecture, give students 2-3 minutes to finish making notes in the L column. You might have students turn in their charts so that you can assess the changes they have reported in their thinking and note any ongoing points of confusion so that you can address those in upcoming classes.

### **Making Predictions**<sup>iv</sup>

This strategy is designed to prepare students to actively listen to lecture and use and integrate new information as they are learning it. *(Note: This strategy works best as a sequence with students working before and at the end of lecture.)*

1. Before the lecture begins, give students a mini-case (3-5 sentences) describing a problem that experts in your field would use the key concepts in the lecture to solve. Have them write down their prediction of

how they think the problem will be resolved. In a synchronous class, you might ask students to share some of their ideas verbally or in a chat. In an asynchronous class, you might ask students to put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.

2. During the lecture, pause at least once (though you might pause two or three times) and give students a minute to re-read their initial predictions and make notes on the same paper about how their thinking is changing by having them answer questions like these:

- Given what you are learning in the lecture, would you still make the same prediction about the case, or would you revise it?
- Where was your initial thinking correct?
- Where was your initial thinking flawed?

In a synchronous class, you might ask students to share some of their ideas verbally or in a chat. In an asynchronous class, you might ask students to put their responses in a Blackboard Journal or an assignment that they submit after they have watched the lecture.

3. At the end of the lecture, have students reflect back on the mini-case and write a couple of sentences that articulate their current thinking about the problem and the solution. You might have students turn in these papers so that you can see how they are beginning to integrate concepts from the lecture into their thinking and where they are still struggling.

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<sup>i</sup> Adapted from Angelo, T.A. and Cross, K.P. (1992). *Classroom assessment techniques: A handbook for college teachers*. 2<sup>nd</sup> ed. San Francisco, CA: Jossey-Bass.

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<sup>iii</sup> Adapted from Rice, G.T. (2018). *Hitting pause: 65 lecture breaks to refresh and reinforce learning*. Sterling, VA: Stylus.

<sup>iv</sup> For information about the importance of prediction for learning, see Lang, J. (2016). *Small Teaching: Everyday lessons from the science of learning*. San Francisco, CA: Jossey-Bass.