

Start your lecture off on the right foot by actively engaging students in the first five minutes. By getting students involved early on, they become active participants in their learning, which helps them retain material and understand it on a deeper level.

You can also use these strategies throughout your lecture to reset student attention as you move from topic to topic.



Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Small group discussion

Briefly introduce your lecture topic and then ask students to spend a few minutes talking to their neighbor about what they know about it. Have a few groups share out or ask them to post their ideas to an open-ended poll that you project on the screen. Take a few notes on their responses.

As you lecture that day, refer to student responses so that you can correct any misconceptions that have surfaced or point out connections between your lecture materials and students' own ideas and experiences. This can help students integrate the new material into their existing knowledge and expereinces.

Mix it up: Have students post their thoughts on the weekly topic to the discussion board in Canvas before they come to class so that they come prepared.

Source/examples: Lang, J. M. (January, 2016). "Small Changes in Teaching: The First Five Minutes of Class," *Chronicle of Higher Education*. (<u>http://tinyurl.com/yct8q5vx</u>)

Setting the Stage



Class Size: Small (<30)

- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Small group discussion
- Shared note taking

Instead of starting lecture with a recap of what you have learned about a topic up until that point, turn the job of recapping back on your students.

Ask students to spend a minute writing down everything you have already covered about a particular topic. Then have them share what they remember with their neighbors and add anything they missed to their notes.

Have a few groups share out what they remember and remind them of anything that they might have missed.

This exercise increases retention of materials by asking students to become active participants in recalling what they have already learned, thereby strengthening those memories.

Source/examples: Source/examples: Lang, J. M. (January, 2016). "Small Changes in Teaching: The First Five Minutes of Class," *Chronicle of Higher Education*. (http://tinyurl.com/yct8q5vx)

Setting the Stage



- Class Size:
- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Writing
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Instead of beginning your lecture by listing the topics you will cover that day, start with an essential question to get students thinking about why the subject matters in a big picture way. For example, instead of starting by saying that you will cover the causes of WWII, try asking, "Is there ever a just war?"

Ask students to write for a minute about their answer to the question before the lecture begins. You can have them revisit their answers at the end of the lecture or at other times during the semester so they can see how their thinking has evolved. This can help students make meaning of the material and better understand why it matters.

Source/examples: McTighe, J. and Wiggins, G. (2013). *Essential Questions: Opening Doors to Student Understanding*. (http://tinyurl.com/pggpcgc)

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Setting the Stage



- Class Size: Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Listening
- Forming connections

Try beginning your lecture by telling a story about your topic. Not only can this "hook" your learners by starting your lecture in an engaging way, but it can also improve student comprehension.

Students are better able to understand and retain information when it is connected to a narrative. If you periodically refer to the story throughout the lecture, they can form stronger connections to the content.

Narratives can also help students develop empathy and make meaning out of information--why does the material you're teaching matter? How does it relate to the real world?

Source/examples: Easton, G. (2016). "How Medical Teachers Use Narratives in Lectures: A Qualitative Study," *BMC Medical Education* (http://tinyurl.com/y6uvq9pg)

Setting the Stage



Class Size: Small (<30)

- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Answering a question

Asking students to begin class by answering a poll question helps them become responsible for their learning and increases their investment in the subject matter.

Before class, create a poll using a tool such as PollEverywhere or Qualtrics, and ask a question that students can answer quickly. Multiple choice question without obvious answers work well for this activity.

Give students a minute to answer the poll using clickers or their cell phones. Then have them find a neighbor with a different response and ask them to try to persuade each other that their answer was correct. Share the live results with your class and refer to the answers during the lecture.

Source/examples: Anderson, J. (2014) https://www.gse.harvard.edu/news/14/11/benefit-intera ctive-learning

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Setting the Stage



The best way to get community rolling is to devise a good icebreaker on day one. The best icebreakers work on many levels.

- They set the tone for the course. Will this course be challenging, fun, serious? Make sure the questions you ask/activities you do match the tone of the course as a whole.
- They give students a low-stakes way to practice the skills they'll need for the course. Will students need to talk to each other? Use a particular technology? This is a good chance to practice those skills.



- Class Size:
- Small (<30) Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

Icebreakers

- Type/Elements:
- Reading
- Small group discussion

Students often feel lost at the beginning of the course, but many of the questions that they have can be answered by the syllabus. Instead of talking about the syllabus on the first day, turn reading the syllabus into an icebreaker.

Divide students into groups and have them spend five minutes discussing and writing down their biggest questions about the course such as "How is participation graded?" or "Is there a final exam?"

Then distribute the syllabus and have them look through it to answer as many of their questions as they can.

Reconvene the class and ask students to share some of their questions and where they found the answers. Emphasize that everyone starts the semester with questions and that they'll find many answers in the syllabus. Answer any questions not addressed in the syllabus.

Source/examples: Ohio State University Center for the Advancement of Teaching (<u>http://tinyurl.com/y99rcd45</u>)



Setting: Online

In person with student laptops

- Class Size: Small (<30)
 - Medium (30-50)
 - Large (50+)

Time: Medium (5-30 min) Type/Elements:Navigating Canvas

Because all instructors organize their Canvas sites in slightly different ways, students are often confused about where to find things in each new course.

To solve this problem, create a "Canvas Scavenger Hunt" document that asks students to find the most important aspects of your Canvas site, for example, "Where do you find the readings for this course?" or "How will you submit assignments?"

Have them complete the scavenger hunt before the second class to make sure that everyone can find all of your course materials and activities. Check in with them at the start of the next class to answer any questions that they have.

Mix it up: If students use laptops in your class, divide them into groups and have them complete the scavenger hunt in class. This way it doubles as an icebreaker.

Example: http://tinyurl.com/y73valjk

Icebreakers



- Class Size:
- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

- Type/Elements:
- Discussion
- .

Identify misconceptions that your students come in with on day one so that you can actively correct them during the course and help your students get to know each other.

Post signs around your classroom with statements about your subject matter and have students walk around and designate each one as true or false. Think about common misconceptions that students have about your topic and include a few of those, for example, in a biology course you could write "Evolution is just change over time." Encourage them to talk to each other as they decide on their answers.

Reconvene the class and discuss whether each statement is true. Explain any misconceptions or use this activity as a teaser to let them know that you'll explain them at a future date.

Mix it up: Instead of creating signs, create an online poll that students can take using clickers or their cell phones.

Source/examples: Lansing Community College Center for Teaching Excellence (<u>http://tinyurl.com/y7h2zvlf</u>)

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Icebreakers



Time: Medium (5-30 min) Type/Elements:

Class Size:

Small (<30)

- Discussion
- 4

Start your class out on the right foot by talking openly about course expectations.

Before class begins, write on the board, "The best class I ever took" and underneath "What the teacher did:" and "What the students did:" Then repeat the prompt for, "The worst class I ever took."

Ask students to talk in groups--being careful not to reference actual courses or instructors--about what the teachers and students did in the best and worst courses they have taken. Then have one person add some of the group's responses to the board. If they're not sure what the students did, add some ideas of your own.

Bring the class together and discuss what they can expect from you this semester and also what their responsibilities are for a successful class. Let them know that you're confident you can have a "best class" but that it will take work from everyone to make it happen.

Source: Weimer, M. (July, 2017). "First Day of Class Activities that Create a Climate for Learning," *Faculty Focus*. (http://tinyurl.com/y8m6bjjq)

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Icebreakers



Class Size:

- Small (<30) Medium (30-50)
- Medium (50-50
 Large (50+)

Time: Medium (5-30 min)

- Type/Elements:
- Small-group Discussion
- Speaking in front of the
- class
- Writing

Sometimes students feel nervous about introducing themselves in front of the class. Help them gain confidence by getting them talking in small groups.

Ask students to work in pairs to interview each other about their reasons for taking the course and what background they have in the subject.

In small classes, you can then go around the room and have each student introduce their partner to the class.

In larger classes, combine several of the groups together and have students introduce their partners to the combined group.

Mix it up: In courses where writing is important, have students interview each other entirely through writing.

Source: Ohio State University Center for the Advancement of Teaching (<u>http://tinyurl.com/y99rcd45</u>)

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Icebreakers



- Class Size:
- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

- Type/Elements:
- Discussion
- Problem solving

On the first day of class, give students an introduction to one of your course themes and then hand out a problem for them to solve in small groups. Make sure that the problem is achievable to students who are new to the material. If you are passing out worksheets, give one sheet per group so that students have to work together.

Reconvene the class and ask for volunteers to share their solutions. In small classes, you can check in with each group to see how they're solving the problem.

This activity gives them a chance to get to know their classmates and sets the stage for future group work in the course.

Source/examples: Buirs, B. A. (January, 2016) "First Impressions: Activities for the First Day of Class," Faculty Focus. (<u>http://tinyurl.com/y9yjn5qs</u>)

Icebreakers



Class Size:

Small (<30) Larger classes online

Time: Medium (5-30 min) Type/Elements: Discussion Ask students to think for a minute about a question that allows them to relate the topic of your course to their personal experiences. For example, if you teach an education class, you might ask, "What was the best learning experience you ever had?"

Go around the room and ask students to introduce themselves and answer the question. Keep track of student answers and refer to them as you introduce the major themes of the course so students can immediately see how course content relates to their personal experiences.

Mix it up: Ask students to answer these questions on a discussion board in Canvas.

Icebreakers



Creating a course community that fosters trust between students and the teaching staff and substantive relationships among the community members promotes student commitment to the course and to their learning. The cards in this deck provide ways to build a strong community in your course.



Setting: Online Out of Class Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Reading
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A frequent source of stress and frustration for students and faculty occurs when students need assistance and do not know how or who to ask. Save yourself from trying to field IT questions or receiving complaints about emails not answered quickly enough. Save your students from the stress of needing help and not knowing how to get it.

- With your teaching staff decide who, how, and how quickly you will handle different types of students help needs.
- 2) In your syllabus or on your course site provide a clear list of different avenues for getting help that outlines the type of help needed, the appropriate mode for posing the issue, and the expected response time from teaching or other support staff.

Source: Digital Teaching and Learning, Harvard Division of Continuing Education, http://bit.ly/2vPDdvn

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Community



Out of Class

Class Size:

Small (<30) Medium (30-50)

Time: Varies Type/Elements:

Begin your class with an intention-setting activity in which you and your students suggest and negotiate a set of expectations for behavior as part of the class community. Questions you may want to consider are:

- 1) What uses of laptops or phones are acceptable in class?
- 2) How should the class handle comments or behaviors that are offensive to some students?
- 3) What level of privacy does the class expect with respect to in-class discussions or activities?

Source/examples: Asst. Dean Emily Click, HDS

Community



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Setting: In Class	Class Size: Small (<30) Medium (30-50) Large (50+)
Time: Medium (5-30 mins)	Type/Elements: Discussion
Community	

Take the time to learn student names and refer to your students by name. When teachers know their names, students feel more positive about a course and their instructor, more able to ask for help, and believe they will perform better.

Many simple strategies can make this possible even if recalling names doesn't come easily:

- 1) Use an icebreaker to get started learning students names.
- 2) Have students use name cards or tags in class.
- 3) When students speak in class, ask them to begin by saying their name.
- 4) Use names you know and forgive yourself if you haven't yet learned everyone's name.

Source: Cooper, K. M., Haney, B., Krieg, A., & Brownell, S. E. (2017). What's in a Name? The Importance of Students Perceiving That an Instructor Knows Their Names in a High-Enrollment Biology Classroom. CBE-Life Sciences Education, 16(1), ar8.



Time: Medium (5-30 mins)

- Class Size: Large (50+)
 - Type/Elements:
- Writing
- Speaking
- l.

Community

In large classes it often isn't feasible or reasonable for faculty to respond to student postings on a discussion board or to individual submitted assignments. However, student engagement and performance is positively impacted by perception of faculty engagement with their work.

- Have your teaching assistants select a few interesting student comments or submissions to bring to your attention OR skim student submissions to find a few that catch your attention.
- 2) Respond to individual student work In class, in online discussion forums, or by announcement/email. All students will receive the benefit of the interesting student work and of knowing that the faculty member is engaged and reading student work..

Source: Umbach, P. D., & Wawrzynski, M. R. (2005). Faculty do matter: The role of college faculty in student learning and engagement. Research in Higher Education, 46(2), 153-184.



Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements: Writing
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Community

Spend the last few minutes of class having students write minute papers reflecting on the class session. Minute reflections help students integrate ideas from the class and help faculty identify areas of confusion or concern among students.

Minute reflections are typically structured by a few questions, which can of course be customized as you see fit:

- 1) What are 1 or 2 of your most significant learnings from this session?
- 2) What questions do you have?
- 3) Please share any other feedback you have.

Mix it up: Minute reflections can also easily be done online, anonymously or identified, using Canvas Surveys.

Source/examples: Angelo, T. A., & Cross, K. P. (1993). Minute paper. Classroom assessment techniques: A handbook for college teachers, 148-153.



Time: Short (<5 min) **Class Size:** Small (<30) Medium (30-50) Large (50+)

- Type/Elements:
- Poll
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Community

Do a rapid, anonymous poll of your students to get a sense of their comfort with the material and pace of the class. Share the results so they become aware of the range of experiences across the students in the class. General poll questions might include:

- 1) How much time did you spend on the homework this week?
- 2) Rate the difficulty of the course content (too easy/too hard)

Mix it up: Specific poll questions on subjects already covered or to be covered along with a question that asks student to rate their confidence in their answers can provide a good sense of where the students in relation to the material and a good starting point for discussion.

Good tools for conducting a poll include Qualtrics, Poll Everywhere, or good old paper and pencil.

Source: Davis, B. G. (2009). Tools for teaching. John Wiley & Sons. See chapter "Fast Feedback"



Setting: Out of Class

Time: Medium (5-30 min)

- Class Size: Medium (30-50)
- Large (50+)

- Type/Elements:
- Discussion
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Create an interaction plan for your teaching staff that details the various ways your students will interact with teaching staff and receive feedback. Assign responsibility clearly within the staff to ensure that the full set of responsibilities are covered and that workloads are reasonable. Here are some questions you may want to ask yourselves as you create your interaction plan:

- 1) What is your timeframe for responding to student questions and returning student work?
- 2) Who is responsible for grading?
- 3) Who will plan/teach sections?
- 4) Who will be responsible for monitoring Q&A and discussion boards?
- 5) What methods will you use to respond to student discussions?
- 6) How will you respond to weekly feedback surveys?
- 7) What other methods will you use to interact with your students?

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Community



Setting: Out of Class	Class Size: Small (<30) Medium (30-50)
Time:	Type/Elements: Discussion

Community

Office Hours by appointment are a common way for faculty to make themselves available to students, but they are often overused by some students and underused by others. Providing some structure to office hours can help encourage better use of faculty time and focus the content of meeting time. It can also help students who don't feel they have a specific topic to discuss but could still benefit from a chance to meet their faculty. Here are a few suggestions for how one might structure office hours.

- Require students to sign up to attend office hours at least once during the semester in a group of at least 3 students.
- 2) Provide some suggested discussion topics or a brief, provocative pre-reading.
- Ask students to come prepared to talk about a few questions provided in advance, perhaps about their academic interests and how they relate to the course material.



Active learning is an approach to instruction in which students engage the material they study through reading, writing, talking, listening, and reflecting. Active learning increases student engagement and improves student learning outcomes. The cards in this deck provide simple ways to add active learning into your class sessions.



Setting:

Time:

In Class Out of Class Online Class Size:

- Small
- Medium
- Large

- Type/Elements: WritingReading
- Readir
- - •

Active Learning

Long (>30 min)

- Provide students with a case (real or something that can reasonably take place) that has a conflict that must be resolved. This can be simple or complex (with data, etc.).
- 2) Students use previously learned content to discuss in pairs/small groups how they would solve the conflict.
- 3) Students can briefly present their findings to other small groups or to the whole group or simply record ideas on an overhead/whiteboard so that instructor can draw questions and synthesis from the material. If online you can use the Zoom Whiteboard, Google Docs, or Padlet.

Mix it up: Students can develop their own case studies as an assignment.

Source/examples: University of Minnesota - Active Learning Classrooms, ABL Connect, HKS: http://bit.ly/2fdthFZ.



Class Size:

- Small
- Medium
- Large

Time: Medium (5-10 min)

- **Type/Elements:** Talking/writing
- Listening

- Pose a (pre-planned) question for discussion or a problem to solve. This question ideally is one that introduces or summarizes a class topic and encourages students to reflect on pre-reading or what they've learned in class.
- 2) Give students 1-2 minutes to think about/jot down their thoughts on the discussion or problem.
- Have students pair up to share their work for 2-3 minutes. If on web conference, use breakout rooms.
- 4) Choose a few pairs to give a 30 second summary of their ideas or solution.

Mix it up: The discussion question can be used at the beginning of the class to introduce a topic or at the end to summarize the class.

Source/Examples: University of Minnesota - Active Learning Classrooms, ABL Connect

Active Learning



- Class Size:
- Small
- Medium
- Large

Time: Medium (5-10 min)

- Type/Elements:
- Reflecting
- Talking/writing
- Listening
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- .
- Active Learning

- Have students respond to class content (video, panel, lecture segment, readings) and compose one or two questions about it; they may do this in class or you may ask students to bring questions with them in response to their pre-reading
- Have students students pair up; A asks a prepared question and B responds; then B asks a prepared question and A responds. Online, students can submit these questions via a polling tool or in advance via Canvas.
- 3) Ask for a sampling of questions and answers in order to bridge to a full group discussion.

Source/examples: University of Minnesota - Active Learning Classrooms, ABL Connect



Class Size: Small Medium Large Type/Elements:

- Reflecting
- Writing

- Active Learning

Time: Short (<5 min)

- 1) Ask students to write for 2-3 minutes on a topic or in response to a question that you've developed for the session. This response can include reactions or questions.
- 2) Students can submit them privately to teaching staff or share out. You can use Canvas to submit online.

Such activities will help (a) stimulate more students to complete pre-class reading and preparation, (b) focus student attention to selective information presented during mini-lectures, (c) stimulate individual reflection and/or problem solving through writing, and (c) increase the proportion of students willing to volunteer a contribution to a subsequent class discussion.

Source/examples: ABL Connect, Eison, J. (2010). Using active learning instructional strategies to create excitement and enhance learning. Jurnal Pendidikantentang Strategi Pembelajaran Aktif (Active Learning) Books, 2(1), 1-10.



Class Size: Small Medium Large

Time: Medium/Long (varies)

- Type/Elements: Reflecting

- Writing

- 1) Provide a flipchart in the corner of each room. Online, you can make separate discussion boards in Canvas.
- 2) Put students in groups of 3-6 people and have them move from corner to corner to discuss answer(s) to each posed question. The groups develop a consensus and write their answer directly on each flipchart.
- 3) When the flipchart has an answer already written by a previous group, the next group revises/expands/ illustrates that response with additional information, if possible. Different colored markers can be used for each group to see what each group wrote for each question.

Source/examples: University of Minnesota - Active Learning Classrooms, ABL Connect

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Active Learning



Time Long (<30 min) **Class Size:** Medium Large

- Type/Elements:Reflecting
 - Writing
 - Talking/listening

- Divide a project or theme into smaller topics or "puzzle pieces". For example, a class about WWII can be broken up into Allied and Axis leaders.
- 2) Make groups where every member of a team is assigned to read and become an expert on one piece of the puzzle. For example, every member of one group researched the Allied side of WWII.
- 3) After each person has become an expert on their piece of the puzzle, groups re-arrange where one person from each expertise group is represented in the new group. Each person teaches each other their expertise. This can be timed.

Mix it up: You can set this up in advance as an assignment for the student. You can also stretch this across 2 classes. This can also be combined with role play.

Source/examples: University of Minnesota - Active Learning Classrooms, ABL Connect

Active Learning



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Class Size:

- Small
- Medium
- Large

Time: Short (<5 min)

- **Type/Elements:**
- Reflecting

- Set up an interactive poll, such as PollEverywhere or Qualtrics, in advance.
- Pose a simple questions students can respond to quickly and succinctly. (For example, "how would you describe _____ in a sentence?")
- 3) The instructor and students can both see the live results in graph form or short comment form.
- 4) Use these responses to guide your discussion or lecture.

This is a good way to get reactions quickly from a broad set of students or to introduce a topic.

Active Learning



Time: Short (<5 min)

Small Medium Type/Elements: Writing Reading

Class Size:

After personally modeling and establishing a pattern of how this is best done at the start of each semester:

- Assign students the task of (a) locating a topic relevant to the course (b) making a brief in-class oral presentation about the topic found. You should provide guidelines ahead of time.
- 2) Alternatively, each student can be required to prepare a brief written synopsis of his or her news item for posting on an electronic discussion board or course website.
- In a relatively short amount of time, you will have a rather large collection of current illustrative material for your classes.

Mix it Up: This can be used to share theories or content otherwise not covered by lecture.

Active Learning



Setting: In Class Out of Class Online	
Time: Medium/Long (~20-45 minutes)	-

- Class Size:
- Small
- Medium

Type/Elements: Talking/Listening Reflecting Classroom debate assignments help students (a) learn to locate information, (b) think critically, (c) formulate persuasive arguments and counterarguments, and (d) express themselves in oral and written forms:

- Set up the context for the debate by using lecture time and/or requiring students to prepare ahead of time.
- 2) Split students into different groups and have you or TAs lead the discussion.
- 3) Worksheets to help students plan their dialogue can be very helpful.

For asynchronous online courses, tools such as Kialo will help with non-live debates. For web conference courses, breakout rooms can be used.

Source/Examples: Northern Illinois University, Faculty Development and Instructional Design Center has a good planning tool for using debate in your classroom: http://bit.ly/2s32Pax

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Active Learning



Much of student work and study is assigned with little structure and completed individually outside of class time. Providing students with some additional structure to guide their study and their assimilation of lecture concepts can help students improve their learning, retention, sense of purpose, and efficiency. The cards in this deck give suggestions for ways to provide light structure and guidance to students as they do their work that will help them to get the most out of your class and to develop good habits to bring to other classes in the future.

Source: Paff, L., (August 2017). Questioning the Two-Hour Rule for Studying. Faculty Focus. Retrieved from http://bit.ly/2xgkQ6D



Setting: Out of class Online Class Size:

- Small
- Medium
- large

Time: Long (<30 min)

- Type/Elements:
- Reading
- Reflecting
- Writing

Structured Study

Have students create four types of questions from course content (such as a reading assignment), with each question moving to a "higher" level of thinking.

- 1) Write a question asking for an important fact stated directly in a text.
- 2) Write a question that addresses the relationship between two concepts from class or the reading.
- Write a question based on patterns or relationshipsa symbol, a theme that recurs.
- Write a question based that relates the class or reading concepts to the larger course context, everyday life, or larger contexts.

Provide a way for students to share their questions to make a student-created study resource.

Mix it up: This can work in a variety of classes, including more technical ones, where students develop problems of increasing difficulty.

Source/examples: Ask Up, University of Minnesota - Active Learning Classrooms, ABL Connect



Setting: Out of class

Online

Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

- Type/Elements: Writing
- Wonning
- Mapping
- •

Concept maps are tools for organizing and representing knowledge. They include concepts, usually enclosed in circles or boxes of some type, and relationships between concepts or propositions, (indicated by a connecting line and linking word) between two concepts.

- 1) Ask students to generate a concept map of the lecture, readings, or subject for the week.
- 2) Students can draw concept maps on paper use a free online tool like Popplet.
- Optionally: Use a Canvas Discussion board to have students submit and share their concept maps.

Source: Berry, J. W., & Chew, S. L. (2008). Improving learning through interventions of student-generated questions and concept maps. Teaching of Psychology, 35(4), 305-312.

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Structured Study



- Class Size: Small (<30)
- Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

- Type/Elements: Writing
- Mapping

Encourage all students to take notes in class and provide a resource on how to make an effective note-taking strategy.

Mix it Up: Have students sign up for a particular date or set of dates to be one of the note-takers responsible for sharing notes. Provide a space or method for students to contribute their notes to the class community, such as a Canvas Discussion or a Google Drive folder.

Source: Friedman, M. C. (2014). Notes on note-taking: Review of research and insights for students and instructors. Harvard University. Retrieved from http://bit.ly/2xg85J1

Structured Study

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Setting: Out of class

Online

Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

- Type/Elements:
- Short answer questions
- Multiple choice
- questions
- Writing

Providing students with opportunities to confirm their understanding of reading, lecture, or other materials helps them build confidence in their knowledge and identify areas of confusion prior to high-stakes assessments.

- Provide a small number of quiz-like questions for students to use as practice.
- 2) Use a Canvas Quiz to grade the questions automatically and provide useful feedback and explanations.
- Assess student participation, not correctness, for these low-stakes practice questions. To emphasize mastery, give students multiple attempts and consider requiring students to provide a correct answer before progressing.

Source: Roediger III, H. L. (2013). Applying cognitive psychology to education: Translational educational science. Psychological Science in the Public Interest, 14(1), 1-3.

Structured Study

Graphic design by Karina Lin. Content by Harvard Division of Continuing Education.



Setting: Out of class Online Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (<5 min)

- Type/Elements:
- Writing

Ask students to write down the top 1, 2, or 3 takeaways or most important points or concepts for a given lecture, unit, or reading.

Have students share their takeaways using a Canvas Discussion or other forum.

Source: Angelo, T. A., & Cross, K. P. (1993). Minute paper. Classroom assessment techniques: A handbook for college teachers, 148-153.

Structured Study

Graphic design by Karina Lin. Content by Harvard Division of Continuing Education.



Experiential learning is a powerful pedagogy that can be leveraged to foster deep learning in any discipline, but what is often thought to be a complex set of teaching practices can actually be quickly and easily implemented in any classroom. Mini-experiences provide students with the opportunity to apply their knowledge in a controlled by challenging environment that pushes their learning up the scale from understanding to application and from application to internalization.

The cards in this deck provide a range of activities and strategies for creating challenging, exciting, and easily adaptable learning experiences.



Time: Medium (5-30 min) Long (>30 min)

- Class Size: Small (<30)
 - Medium (30-50)

- Type/Elements:
- Speaking
- Discussion
- Listening
- Reflecting
- Problem solving

Students develop greater capacity for knowledge application and transfer when they see what they are studying in context and in action.

- 1. Explain the context & purpose of the activity
- 2. Define the setting & situation
- 3. Give students roles (as individuals or groups) & if necessary, provide them with details about how this role fits into the situation.
- 4. Allow students enough time to role play the scenario beyond the information given to them
 requiring analytical & adaptive thinking & problem solving.
- 5. Have students reflect on the activity, think about how the act of applying the material affected their thinking, and consider other situations in which application might occur.

Source/examples: Brown University Harriet W. Sheridan Center for Teaching and Learning (<u>https://tinyurl.com/y7knfwxu</u>)

Mini Experiences



- Class Size: Small (<30)
- Medium (30-50)
- Large (>50)

Time: Medium (5-30 min) Long (>30 min)

- Type/Elements:
- Small group discussion
- Speaking
- Listening
- Reflecting
- Shared note taking
- Problem solving

Students constantly analyze what instructors do and say in class and these analyses are fertile ground for learning.

- 1. Share the purpose & objectives of the demonstration/application with the class.
- Before the demonstration, have students take
 1-2 minutes to think on their own about what
 they expect the demonstration to show.
- 3. Have students pair-up with a neighbor to compare thoughts.
- 4. Conduct the demonstration.
- Ask students to share what they discussed before the demonstration & to reflect on this in light of the demonstration.

Source/examples: Brown University Harriet W. Sheridan Center for Teaching and Learning (<u>https://tinyurl.com/y7knfwxu</u>)

Mini Experiences



Setting:

In Class Out of class

- Class Size:
- Small (<30)
- Medium (30-50)
- Large (>50)

Time: Medium (5-30 min)

- Type/Elements:
- Speaking
- Listening
- Reflecting
- Problem solving

The best way to learn is to teach.

- 1. Break students into groups of 3-5.
- 2. Give each group member a different question/problem to work on as homework before the next class.
- 3. In the next class, bring groups back together.
- 4. Each group member has 5-10 minutes to teach the rest of their group how to solve the question/problem given to them.

Source/examples: This activity is a variation on a practice widely used in faculty development. For more information on microteaching see The Derek Bok Center for Teaching and Learning (https://tinyurl.com/y93kjxn5)

Mini Experiences



Setting:

In Class Out of Class

- Class Size:
- Small (<30)
- Medium (30-50)
- Large (>50)

Time: Medium (5-30 min)

- Type/Elements:
- Small group work
- Discussion
- Listening
- Problem solving
- Generating ideas

Understanding the processes underlying a topic is often just as important as understanding the topic itself.

- 1. After covering a topic, break students into groups of 3-5.
- 2. Instruct groups that their task is to write a rule book or instruction manual (whichever is more applicable to the material) on the topic. Specify that the audience for this rule book/instruction manual is individuals who have no prior knowledge of the topic.
- 3. Instruct groups to write their rule book/instructional manual out in detail.
- 4. Ask a few groups to share the results of their work, leaving time for questions & criticism from the instructor & the class.

Source/examples: Erin Baumann, SLATE Program (HKS)

Mini Experiences



Class Size:
Small (<30)

- Medium (30-50)
- Large (>50)

Time: Medium (10-30 min) Long (>30 min)

- Type/Elements:
- Problem solving
- Generating ideas
- Speaking
- Listening
- Discussion

Deep learning requires students to move beyond being able to answer 'what?'. They must also be able to answer both 'how?' and 'why?'

- 1. Present students with an idea or an issue on which there is clear or open debate.
- 2. Break students into three groups the prosecution, the defence, & the jury. Explain that in the Trial of Idea X their respective tasks are to argue against the validity of the idea/issue, to argue for its validity, & to deliver a verdict on its validity based upon the arguments presented.
- 3. After the jury delivers their verdict, ask members of that group to explain how they settled on that verdict.
- 4. Conclude the activity with a full class discussion of the exercise & what was learned.

Source/examples: Erin Baumann, SLATE Program (HKS)

Mini Experiences



Small groups give students an opportunity to develop deep learning, to build on the knowledge and skills of their classmates, and to engage in higher-order thinking that challenges their development as learners and practitioners. Active engagement with peers also helps students create closer learning communities, which support learning that extends beyond the classroom walls – whether they be brick-and-mortar or digital.

The cards in this deck provide a range of strategies for creating active and engaging small group learning opportunities.



Time: Medium (5-30 min) Long (>30 min)

- Class Size:
- Small (<30)
- Medium (30-50)
- Large (50+)

- Type/Elements:
- Problem solving
- Discussion
- Small group work

Give students an opportunity to develop content expertise and collaborative problem-solving skills by working through the individual steps or constituent pieces of a question or problem.

- 1. Present students with a question or problem
- 2. Break students into groups of 3-5 & instruct them to use the allotted time (3-5 min) to think about what their first step would be to address the question/problem.
- 3. Shuffle groups to create new groups
- Instruct groups to share what their previous group discussed & then think about what their next step should be to address the question/problem.
- 5. Repeat steps 3-4 as needed
- 6. Ask a few groups to share the full process they ended up with for addressing the question/problem

Source/examples: This activity is based on the jigsaw expertise technique.

Small Groups



Class Size:

- Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (5-10 min) Medium (10-30 min)

- Type/Elements:
- Small group work
- Forming connections Reflecting

- Give students an opportunity to engage in peer learning by sharing their thoughts, questions, concerns, etc. with a small group.
 - 1. At a transitional point in the class, have students group with 1-2 of their neighbors to discuss what was just covered. Instructors should specify the parameters of the discussion (e.g. questions/concerns about the material, thoughts on how the material relates to other topics covered, etc.). This activity can be particularly powerful when students grapple with a challenging question or problem.
 - 2. Bring the class together for an open discussion or ask a few groups to share what they discussed.

Source/examples: University of Chicago Center for Teaching (<u>https://tinyurl.com/y984sqk</u>)

Small Groups



Class Size: Small (<30)

- Medium (30-50)
- Large (50+)

Time: Medium (5-30 min)

- Type/Elements:
- Small group discussion
- Speaking
- Listening
- Forming connections

Some students may not feel comfortable speaking in front of a large group. Create an easier space for sharing.

- 1. Break students into groups of 4-6.
- 2. Give groups a topic & instruct them to, first, share their individual thinking and, then, engage in an open discussion - ensuring that each individual build discussion on the thoughts of others. Inform students that it is important that only one person speak at a time.
- Ask a few groups to share what they discussed with the class & to highlight any new or interesting ideas that emerged in their discussions.

Source/examples: University of Waterloo Centre for Teaching Excellence (<u>https://tinyurl.com/p46w3lu</u>)

Small Groups



Time: Medium (5-30 min) Long (>30 min) **Class Size:** Small (<30) Medium (30-50)

- Type/Elements:
- Small group discussion
- Generate ideas
- Problem solving

Working with peers can give students an opportunity to see issues from new angles and, in doing so, to generate new ideas.

- 1. Present students with a question & have them to take 1-2 mins to think about it on their own.
- Have students pair up with a neighbor & take
 2-3 mins to share their individual thinking on the question.
- 3. Have pairs group-up with a neighboring pair & take 3-5 mins to work on a new question related to the original.
- 4. Repeat step 3 (having groups double in size with each round) as needed.
- 5. As a few groups to share the answer they came up with for the last question posed.

Source/examples: University of Waterloo Centre for Teaching Excellence (<u>https://tinyurl.com/p46w3lu</u>)

Small Groups



Time: Medium (5-30 min) Long (>30 min)

- Class Size:
- Small (<30)
- Medium (30-50)
- Large (50+)

- Type/Elements:
- Speaking
- Listening
- Problem solving
- Generate ideas
- Discussion

Give students a chance to engage in deeper thinking and listening by creating a space for performance and observation.

- Divide students into 2 groups a performance group (PG) & an observation group (OG). Have OG form a circle around PG.
- 2. Give PG a task to perform (e.g. debate, role-play, mini case discussion, problem solving exercise, etc.)
- 3. Tell OG what they should focus on while observing PG.
- 4. After PG performs, as a couple of members to reflect on how they approached the activity
- 5. Open to discussion from OG, asking for reflection on what PG did and why. This discussion isn't about feedback for PG, but rather analysis of what occurred in the performance.

Source/examples: University of Chicago Center for Teaching (<u>https://tinyurl.com/y9g84sqk</u>)

Graphic design by Karina Lin. Content by Harvard Kennedy School.

Small Groups



Setting:

In Class Out of class Online

Time: Short (5)

Short (5-10 min) Medium (10-30 min) Long (>30 min)

- Class Size:
- Small (<30)
- Medium (30-50)
- Large (50+)

- Type/Elements:
- Forming connections
- Listening
- Speaking
- Generate ideas
- Problem solving

Building trust is essential to the learning process. Students who create strong connection with peers can learn more deeply and extend their learning environment beyond the "classroom walls."

- At the start of term, break students into groups of 3-6. Tell them these groups will be their "learning teams" for the rest of term.
- 2. Each week, assign teams a task to work on. Tasks can be in class or outside. What matters more than setting, is that the task be challenging enough to ensure all members of the team must contribute.
- 3. Gather feedback during term on how learning teams are working. This can be done online (using a survey tool), as part of a written homework assignment (having teams assess one another using a rubric), or in face-to-face focus groups.

Source/examples: University of Waterloo Centre for Teaching Excellence (<u>https://tinyurl.com/p46w3lu</u>)

Small Groups



- Class Size: Small (<30)
- Medium (30-50)
- Large (50+)

Time: Short (5-10 min)

- Type/Elements:
- Discussion
- Listening
- Reflecting

- Small Groups

Students are sometimes hesitant to raise questions, difficulties, or concerns in front of a large group. Create a space dedicated to surfacing these kinds of issues that is less intimidating than a full class discussion.

- 1. At a transitional point in the class, signal to students that there will be a 5-minute break before moving on.
- 2. Have students group-up with 1-2 of their neighbors & spend these 5 minutes comparing their notes & asking clarifying questions of one another.
- 3. Before moving to the next topic or piece of material, open the floor to questions.

Source/examples: Cornell University Center for Teaching Innovation (https://tinyurl.com/lgkkmjv)