

Active Learning Strategies for Student Engagement

Reading surveys

Ask students to complete their reading assignments using SQ3R (survey, question, read, recall, review), or PQR3 (preview, question, read, recite, review). Collect their efforts as admit slips at the beginning of class to encourage that reading and to gauge their understanding of it.

Opening Question

Connect prior knowledge to new content by opening your lecture with a question. Post on a PowerPoint slide as students enter the classroom. Give them some time to think, and then ask for answers. This strategy is easy to initiate, takes very little time, works in small or large classes, and effectively focuses students' attention on the day's topic. It also provides you with useful feedback on what students know and don't know about the material being presented.

Journal Free Write

Allow time for students to free write regarding the topic of the day. At the beginning of class, this allows them to engage with the topic in preparation for the lecture. At the middle or end of class, it allows students to recognize what they do or don't understand. You may want to post the topic with direction to write whatever comes to mind, or you could post some guiding questions.

Think-Pair-Share

Periodically throughout your lecture, have the students think on a related question. Then, have them turn to a neighbor to discuss. Finally, randomly call on groups to share key points of their discussion with the class.

Give One-Get One

A variation on Think-Pair-Share in which students first write down their thoughts, compare notes, and collaborate to refine their answers.

Note Thread

A longer variation of Give One-Get One in which individual students write down an important concept or question in response to a short in-class reading or mini-lecture. Each student passes their note to another, who adds a comment, answers, or asks a question. That student passes it on at least one additional time. Ask the final student in the thread to summarize the notes. Then debrief and follow with a mini-lecture to redress misconceptions or introduce a new topic.

Note Check

Ask students to do a “notes check” mid-lecture, such as comparing their notes in pairs, in which one student recalls key points without notes and the other corrects from his/her notes. Variation: students don’t take notes and then write down what they can remember. Students can also generate questions based on their discussion.

Focused Listing

Post a topic on a PowerPoint slide and ask students to create a list of terms or ideas related to it. Topics might relate to the day’s assigned reading, to a previous day’s lecture material, or to the subject of the current session. A fun variation is to provide a letter that all of the words have to start with, *a la* the game Scattergories.

One Minute Paper

Ask students to write for one minute in response to a question. The question could be a specific question regarding the lecture content, “what was the most important thing you learned today?” and/or “what did you find most confusing or unclear?” (aka The Muddiest Point). This strategy is particularly useful at the end of a lecture, as it encourages students to summarize the day’s content. It requires students to put information into their own words, internalizing the content and identifying gaps in their understanding. When collected at the end of class, the minute paper can serve as a classroom assessment technique to help instructors gauge how well students are learning the material, what they understand, and what the instructor needs to spend more time on.

Small Group Study Sessions

Take a break during the lecture and have students gather in small study groups. Provide them with a study guide, and have them “study” together what has been covered so far, compiling a list of questions and key points as they go. Return to the large group lecture, and ask for contributions from their group discussions.

Round Robin

Have students get in groups of 3-5. Pose a problem or question for the students to respond to, quickly going around the circle sharing their ideas or answers. This is useful as a brainstorming activity, or to draw quick responses from students.

Student-Generated Test Questions

Two to three weeks before an exam, have students submit a test question and answer regarding what they think is an important concept. This allows you to assess what they think is important and memorable, and how well they understand and can articulate the answers, with time for feedback and correction of any misunderstanding.

Gallery Walk

Post images, graphs, or charts relevant to course content on the classroom walls (or via PowerPoint made accessible for students' own digital devices) and generate questions for students to answer about them. Students answer individually on their handouts and then compare answers in small groups. Small groups report out their findings. Debrief and follow with a mini-lecture to redress misconceptions or introduce new topic.

Jigsaw

Select a topic that can be broken down into component parts (e. g., Charles Dickens). Form groups of 4-5 members, assigning each group to research a portion of the topic (e.g., biography, novels, Victorian society and culture, etc.). Designate only one member of each group as the group leader. Groups research their individual topics and generate initial findings. Leaders then meet with each other and share their groups' findings. Leaders return to their original groups and report on the other groups' findings. Each group then prepares their own report on the topic, incorporating the other groups' contributions. This process can be very fluid and reiterative, depending on the complexity of the problem and the time permitted. Each group then presents their report. Debrief and follow with a mini-lecture to redress misconceptions or expand upon the information presented by the students.

Fish Bowl

Form a circle of 5 – 8 students (a suitable sub-set of your class size), and arrange the rest of the class around them, so everyone can see and hear the speakers in the “fish bowl.” Those inside the fish bowl discuss a particular course topic, while those outside listen, paying attention to the discussion, observing the interactions within the fish bowl, and taking notes. Those in the fish bowl must take turns speaking, without interrupting each other. No one speaks a second time until all have spoken at least once. After sufficiently covering the topic, invite the observers to report on what they heard and observed. Debrief by summarizing the results of the entire activity. This technique is particularly fruitful in courses where how we say something can be just as or more enlightening than what we actually say.

Caucus/Four Corners

Ask students to align themselves with 2 - 4 controversial positions (e.g., cat people or dog people; climate change – absolutely happening, likely happening, could be happening, not happening). Designate an area of the classroom for each position and direct students to stand or sit in their corresponding spots, forming caucuses. Caucuses generate arguments for their positions and deliver them in the order of your choosing. You may choose to facilitate the arguments or not. Likely, you'll need to intervene or refocus the arguments to remain on topic or to align with course objectives. Invite students to switch caucuses as the arguments are presented, indicating their shifts in opinion. This process can be very fluid and iterative, depending on the complexity of the problem and the time permitted. The largest caucus at the end of the exercise is declared the “winner.” This technique is especially valuable in courses whose learning objectives include persuasion, argumentation, or debate.

Low-stakes Activities

When we ask questions in class, students often just don't respond, either because they don't know the answer, don't understand the question, don't want to expose ignorance, or don't want to appear too eager. These strategies allow you to gauge student learning without shining any light (or casting any shade) on timid students. First, generate a set of questions or problems, perhaps as a reading check or pre-test for new content. Then use one of the following options to prompt and display real-time, anonymous responses.




Online Polling Software

Conduct engaging, low-stakes quizzes using online polling platforms like [Poll Everywhere](#), [Kahoot](#), or [Mentimeter](#). (Free accounts limit the number of respondents, so check with your department to see if they have an account.) [Top Hat](#) is a Penn State approved option that integrates with Canvas.

Hold it Up

Distribute the [Lecture Discussion Facilitation Template](#) and ask students to hold up the corresponding symbol that matches the correct answer or solution. Scan the room to gauge comprehension and redirect as necessary. This can also be done with colored paper and note cards, with A, B, C, and D indicated by color or printed on the cards.

Thumbs Up/Down/Sideways

Students indicate their confidence or comfort with a topic by raising, leveling, or lowering their thumbs above their heads or in front of their chests. (e. g.,   .