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Twelve Active Learning Strategies

Example 1

Opening Question:

Take a moment to reflect on your experience with PowerPoint.

Come up with a positive and a negative example.

Example 1 Explanation

In order for students to learn effectively, they must make connections between what they already know (prior knowledge) and new content to which they're exposed. The opening of a lecture should facilitate these connections by helping students exercise their prior knowledge of the day's subject matter. The following four slides illustrate strategies which stimulate students' thinking and prepare them to learn.

One useful strategy is to open the lecture with a question. Present an "opening question" on a PowerPoint slide, give students a moment to think about their response, and then ask a few members of the class 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 the instructor with useful feedback on what students know and don't know about the material being presented.

Example 2

Introductory Think-Pair-Share

Think of what you know about active learning strategies.

Turn to a partner and share your knowledge.

Do you have anything to share with the class?

Example 2 Explanation

"Think-Pair-Share" is an active learning strategy that engages students with material on an individual level, in pairs, and finally as a large group. It consists of three steps. First, the instructor poses a prepared question and asks individuals to think (or write) about it quietly. Second, students pair up with someone sitting near them and share their responses verbally. Third, the lecturer chooses a few pairs to briefly summarize their ideas for the benefit of the entire class.

When used at the beginning of a lecture, a Think-Pair-Share strategy can help students organize prior knowledge and brainstorm questions. When used later in the session, the strategy can help students summarize what they're learning, apply it to novel situations, and integrate new information with what they already know. The strategy works well with groups of various sizes and can be completed in as little as two or three minutes, making it an ideal active learning strategy for classes in which lecture is the primary instructional method.

Example 3

Focused Listing

Take out a sheet of paper and list as many characteristics of good lecturing as you can.

Example 3 Explanation

Focused listing is a strategy in which students recall what they know about a subject by creating a list of terms or ideas related to it. To begin, the instructor asks students to take out a sheet of paper and begin generating a list based on a topic presented on a PowerPoint slide. Topics might relate to the day's assigned reading, to a previous day's lecture material, or to the subject of the current session. Instructors often move around the room and look at students' lists as they write, briefly summarizing major trends or themes as a way of closing the exercise. Others ask students randomly to share the contents of their lists before moving on with their lecture. In either case, focused listing need not take more than a few minutes. It's an effective way to get students to actively engage material, and it offer feedback that the instructor can use to tailor the subsequent presentation of material to students' needs.

Example 4

Brainstorm

What do you know about the ways students learn?

Start with your clearest thoughts and then move on to those that are kind of out there!

Example 4 Explanation

Like focused listing, brainstorming is an active learning strategy in which students are asked to recall what they know about a subject by generating terms and ideas related to it. In brainstorming, however, students are encouraged to stretch what they know by forming creative connections between prior knowledge and new possibilities. To initiate the strategy, the instructor asks students, via a PowerPoint slide, what they know about a topic. Students are instructed to begin with those things they know to be true and systematically work toward formulating surprising relationships they hadn't considered before.

Brainstorming can work well at the beginning of a lecture to gain students' attention and prepare them to receive the day's material, or it can be used at the end of a lecture to summarize and help students formulate connections between what they've just learned and the world outside the classroom. Like the previous strategies we've discussed, brainstorming can be adapted to large or small classes and can be completed in as little as a minute.

Example 5

Questions?

Example 5 Explanation

Most instructors set aside time for student questions when planning their lectures. In the heat of the moment, however, it's easy to forget to ask them. One of the advantages of PowerPoint is that the instructor can plan breaks for student questions in advance. By inserting a slide that asks for questions, the instructor is reminded to step back from his material and interact with his students. This is also an opportunity for students to catch their breath and reflect on the material. When brief question breaks or other active learning strategies are planned every fifteen minutes throughout the lecture, students' attention is less likely to wander and they're more likely to understand and remember the material after the lecture is over.

Example 6



Example 6 Explanation

One way to gain students' attention and to remind yourself to stop for questions is to insert a blank slide into your presentation. Imagine a lecture hall. The instructor is discussing material, moving through slides, and then the screen goes dark. Students are immediately transfixed. Did the machine break? What is the instructor going to do? At this point you have your students' full attention. You can ask for questions and move on to the next part of your lecture.

Example 7

Think-Pair-Share

Think about how you might use active learning strategies in your lectures.

Turn to a partner and discuss.

Share your findings with the large group.

Example 7 Explanation

Think-Pair-Share and the other active learning strategies we've discussed can be used at transition points in the lecture. Employed in this way, these strategies give students an opportunity to think about and work with material just presented before moving to new information. They also help the instructor gauge how well students have understood the content, perhaps shaping what the instructor discusses during the remainder of the period.

Example 8

NOTE CHECK

Take a few minutes to compare notes with a partner:

- Summarize the most important information.
- Identify (and clarify if possible) any sticking points.

Example 8 Explanation

The note check is a strategy in which the instructor asks students to partner with someone near by and compare their notes, focusing on summarizing key information and locating misconceptions. Students can also generate questions or solve a problem posed by the instructor. The exercise can be completed in as little as two or three minutes.

Some instructors find this strategy problematic because they assume that students will simply not take notes, relying instead on their peers to do the work for them. It's important to remember that students are not giving their notes to one another in this exercise, but working together to fill gaps in their collective understanding of the information. In this way, instructors can help students learn good note taking skills, as well as monitor whether or not students are able to identify the key ideas in the day's material.

Example 9

Question and Answer Pairs

Take a minute to come up with one question.

Then, see if you can stump your partner!

Example 9 Explanation

Question and answer pairs is an exercise in which teams of students practice asking and answering challenging questions. To begin, the instructor asks students to partner with someone near by. Each student takes a minute to formulate one question based on the information presented in the lecture or course readings. Student A begins by posing her question for student B to answer. Then the roles are reversed, with student B becoming the questioner. The instructor may choose to ask for a sampling of student questions, either verbally or by collecting them at the end of the period. Particularly good questions can be highlighted in subsequent lectures or used on practice examinations. The strategy is particularly useful for teaching students how to frame good questions. It can also be used to encourage students to prepare for class if the instructor asks students to formulate questions based on their reading.

Example 10

Two Minute Paper

Summarize the most important points in today's lecture.

Example 10 Explanation

In this strategy, the instructor pauses and asks students to write in response to a question presented on a PowerPoint slide. The strategy can be used at any point in a lecture, but it's particularly useful at the end as a way of encouraging students to summarize the day's content. The minute paper forces students to put information in their own words, helping them internalize it and identify gaps in their understanding.

When collected at the end of the period, 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.

Example 11

If you could ask one last question. . .

what would it be?

Example 11 Explanation

Most instructors end their lectures by asking for questions. To encourage students to think deeply about the material before they leave the room, create a PowerPoint slide which asks them to come up with a final question. The instructor can choose students randomly and answer their questions in the time remaining. If collected in writing, the questions can also serve as a classroom assessment technique to help instructors judge how well their students are learning.

Example 12

One Final Question . . .

Which of the strategies we've covered would you like to try in your own classes?

Example 12 Explanation

In the spirit of active learning, we have a final question for you. Which of the strategies we've discussed in the tutorial would you like to try in your own classes?

Download Example Slides

Please feel free to download a PowerPoint presentation of these [12 slides \(ppt\)](#).

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