Active Learning for the College Classroom

TECHNIQUES OF ACTIVE LEARNING

Exercises for Individual Students: These techniques are generally used to assess student comprehension and to provide the instructor with feedback.

1. The “One Minute Paper”- This technique requires students to answer a posed question on a blank sheet of paper. The question can be specific or open-ended but related to the course material. Give the students one or two minutes to answer the question. This technique can be done as an “initiation” into a lesson or as a way to recap the lesson’s objectives.

2. Muddiest (or Clearest) Point- This is a variation of the “one minute paper” but the students have longer to answer the question. This technique gives the students an opportunity to identify any challenges they had with the lesson. For example, “What was the “muddiest point” of today’s lesson?”

3. Affective Response- This is another “one minute paper” activity that requires students to provide an emotional response to the material.

4. Daily Journal- This requires students to provide a more in-depth response to the material. This can be completed in class or as assigned homework. With this technique you can ask more complex and in-depth questions.

5. Reading Quiz- A quiz will require students to come to class prepared. They are also an effective measure of student comprehension of readings.

6. Clarification Pauses- This technique fosters “active listening”. Throughout the lecture, the instructor pauses to let the key concepts sink in. After the pause the instructor asks anyone if they need clarification.

7. Response to a demonstration or other teacher centered activity- The students are asked to write a paragraph that begins with: I was surprised that/I learned that/I wonder about. This helps students to reflect on the activity.

Questions and Answers

8. The “Socratic Method”- This technique “tests” students’ comprehension of reading assignments and lectures by asking questions during the course of a lecture. The questions posed are deliberately designed by the instructor to allow the students to “discover” what they know about the material and to create an opinion on a topic. The topics covered in a “Socratic Seminar” are usually controversial and two sided. The instructor often plays “devil’s advocate” to get the students to elaborate on their ideas.

9. Wait Time- Here the instructor gives about 15 seconds or so for the students to form an answer to a question. This technique encourages slower thinkers or reluctant participants to develop an answer to a question.
10. **Student Summary of another Student’s Answer**- In order to promote active listening, after one student has volunteered an answer to the instructors question, ask another student to summarize the first response.

11. **The Fish Bowl**- At the end of class, students are given index cards and asked to write down one question concerning the course material. The questions should address any clarifications the students need about the material. The instructor draws questions out of the bowl and answers them for the class.

12. **Quiz/Test Questions**- In this method, students become actively involved in creating quizzes and tests by constructing some or all questions for an exam or quiz. Instructors can also use the questions for review or study sessions.

**Immediate Feedback:** *These methods require instructors to stop at appropriate points in the material to give quick tests of the material. This way, he/she can adjust the lecture mid-course and spend more time on material the students are having difficulty with.*

13. **Finger Signals/Clickers**- Students are asked questions and instructed to signal their answers by holding up the appropriate number of fingers immediately in front of their torsos. For example, a teacher may assign “one finger for ‘yes’ and two for ‘no’” This allows instructors to assess student knowledge at a glance. The same type of thing can be done electronically using “clickers.” This technology is available through Eastern’s IT services.

14. **Flash Cards**- This is a variation of the “Finger Signals” but the students respond to flash cards held by the instructor.

15. **Quotations**- This method is used to assess student understanding of texts and identifying author’s viewpoint and arguments. The instructor uses an overhead projector to present quotations relevant to the theories, schools of thought or concepts. The students are asked to figure out what the author of the quote is advocating for or discussing.

**Critical Thinking Motivators**

16. **The Pre-Theoretic Intuitions Quiz**- At the beginning of a lecture an instructor asks students to identify and to assess their own views on the material to be taught. This could be a simple “True or False” questionnaire about the material.

17. **Puzzles/Paradoxes**- The students are asked to discuss concepts and ideas that do not necessarily have a definitive answer. This allows students to use their intuitions and to develop clear opinions.

**Share/Pair:** *These methods require students to be grouped in pairs. They have the opportunity to state their own views and hear the views of others. Pairs make it impossible for students to avoid participation.*
18. Discussion- Students are asked to pair off and to respond to a posed question.
19. Note Comparison/Sharing- This method requires students to compare notes after a lecture.
20. Evaluations of another Student’s Work- Students are asked to complete an individual homework assignment or short paper. On the day the assignment is due, students submit one copy to the instructor to be graded and one copy to their partner.

**Cooperative Learning Exercises:** *These techniques require students to work in groups of three or more.*

21. Cooperative Groups in Class- Pose a question to be worked on in each cooperative group and then circulate around the room answering questions, asking further questions, keeping the groups on task, and so forth. After the students have time to discuss the material with their groups they will share their ideas with the rest of the class.
22. Active Review Sessions- This method is similar to the previous method but it involves review questions. The instructor poses review questions and the students work on them in groups. Then the students are asked to show their solutions to the whole group and discuss any differences among the solutions.
23. Concept Mapping- A concept map is a way to draw connections between terms and concepts. Students construct concept maps by connecting terms with lines and indicating the relationship between each set. This is an organizational tool for students and it allows them to establish meaningful relationships.
24. Visual Lists- Here the students, in groups, are asked to make a list on paper or on the blackboard. This method is good for comparing and contrasting or presenting pros and cons.
25. Jigsaw Group Projects- In Jigsaw Projects, each member of a group is asked to complete some discrete part of an assignment. When everyone completes their assigned task, the pieces can be joined together to complete the project. This is a helpful way to complete comprehensive reports with many components.
26. Role Playing- Here students are asked to “act out” a part. In doing so, they get a better idea of the concepts and theories being discussed.
27. Panel Discussions- This method is useful when students are asked to give presentations as a way of including the entire class in the presentation. Students groups are assigned a topic and asked to give a presentation. Each panelist is then expected to make a very short presentation, before the floor is opened to questions from the audience.
28. Debates- Formal debates provide an efficient structure for class presentations when the subject matter is easily divided into opposing views. Students are assigned debate teams and given a position to defend and then asked to present their arguments.
29. Games- Games can help students visualize concepts or theories. Instructors could use playing cards to represent certain concepts or create a board game with concepts related to the curriculum material.