

# Learning Activities for the Classroom

The techniques listed below have multiple benefits:

- The activities provide practice with the material.
- The activities require students to become attentive and engaged, which are two prerequisites for effective learning.
- As the instructor, you can easily and quickly assess if students have really mastered the material (and plan to dedicate more time to it, if necessary).

Not all techniques listed here<sup>1</sup> will have universal appeal, with factors such as your teaching style, learning objectives and personality influencing which choices may be right for you.

1. **Picture Prompt** – Show students an image with no explanation, and ask them to identify/explain it, and justify their answers. Or ask students to write about it using terms from lecture, or to name the processes and concepts shown. Also works well as group activity. Do not give the “answer” until they have explored all options first.
2. **Think Break** – Ask a rhetorical question, and then allow 20 seconds for students to think about the problem before you go on to explain. This technique encourages students to take part in the problem-solving process even when discussion isn't feasible. Having students write something down (while you write an answer also) helps assure that they will in fact work on the problem.
3. **Empty Outlines** – Distribute a partially completed outline of today's lecture and ask students to fill it in. Useful at start or at end of class.
4. **Polar Opposites** – Ask the class to examine two written-out versions of a theory (or corollary, law of nature, etc.), where one is incorrect, such as the opposite or a negation of the other. In deciding which is correct, students will have to examine the problem from all angles.
5. **Word of the Day** – Select an important term and highlight it throughout the class session, working it into as many concepts as possible. Challenge students to do the same in their interactive activities.
6. **Recall, Summarize, Question, Connect, and Comment** – This method of starting each session (or each week) has five steps to reinforce the previous session's material: recall it, summarize it, phrase a remaining question, connect it to the class as a whole, and comment on that class session.
7. **Focused Listing** – List several ideas related to the main focus point. Helpful for starting new topics.
8. **Tournament** – Divide the class into at least two groups and announce a competition for most points on a practice test. Let them study a topic together and then give that quiz, tallying points. After each round, let them study the next topic before quizzing again. The points should be carried over from round to round. The student impulse for competition will focus their engagement onto the material itself.
9. **One-Minute Papers** – Students write for one minute on a specific question (which might be generalized to “what was the most important thing you learned today”). Best used at the end of the class session.
10. **Drawing for Understanding** – Students illustrate an abstract concept or idea. Comparing drawings around the room can clear up misconceptions.
11. **What's the Principle?** – After recognizing the problem, students assess what principle to apply in order to solve it. Helps focus on problem TYPES rather than individual specific problems. Principle(s) should be listed out.

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<sup>1</sup> The original list contained more than 180 active learning activities and was adapted from:  
[http://www.fctl.ucf.edu/TeachingAndLearningResources/CourseDesign/Assessment/content/101\\_Tips.pdf](http://www.fctl.ucf.edu/TeachingAndLearningResources/CourseDesign/Assessment/content/101_Tips.pdf)

12. **Bookmark Notes** - Distribute full-length paper to be used as a bookmark for the current chapter. On it, record prompts and other “reading questions”, and require students to record their notes, observations, and objections while reading onto these bookmarks for collection and discussion in class.
13. **True or False?** – Distribute index cards (one to each student) on which is written a statement. Half of the cards will contain statements that are true, half false. Students decide if theirs is one of the true statements or not, using whatever means they desire. Variation: designate half the room a space for those who think their statements are true, and the other half for false.
14. **“Real-World”** – Have students discuss in class how a topic or concept relates to a real-world application or product. Then have students write about this topic for homework. Variation: ask them to record their answer on index cards.
15. **Concept Mapping** – Students write keywords onto sticky notes and then organize them into a flowchart. Could be less structured: students simply draw the connections they make between concepts.
16. **Bumper Stickers** – Ask students to write a slogan-like bumper sticker to illustrate a particular concept from lecture. Variation: can be used to ask them to sum up the entire course in one sentence.
17. **Directed Paraphrasing** – Students asked to paraphrase part of a lesson for a specific audience (and a specific purpose).
18. **Word Journal** – First, summarize the entire topic on paper with a single word. Then use a paragraph to explain your word choice.
19. **Truth Statements** – Either to introduce a topic or check comprehension, ask individuals to list out “It is true that...” statements on the topic being discussed. The ensuing discussion might illustrate how ambiguous knowledge is sometimes.
20. **Objective Check** – Students write a brief essay in which they evaluate to what extent their work fulfills an assignment’s objectives.
21. **Opposites** – Instructor lists out one or more concepts, for which students must come up with an antonym, and then defend their choice.
22. **Student Storytelling** – Students are given assignments that make use of a given concept in relation to something that seems personally relevant (such as requiring the topic to be someone in their family).
23. **Pro and Con Grid** – Students list out the pros and cons for a given subject.
24. **Harvesting** – After an experience/activity in class, ask students to reflect on “what” they learned, “so what” (why is it important and what are the implications), and “now what” (how to apply it or do things differently).
25. **Chain Notes** – Instructor pre-distributes index cards and passes around an envelope, on which is written a question relating to the learning environment (i.e., are the group discussions useful?) Students write a very brief answer, drop in their own card, and pass the envelope to the next student.
26. **Profiles of Admirable Individuals** – Students write a brief profile of an individual in a field related to the course. Students assess their own values and learn best practices for this field.
27. **Categorizing Grid** – Hand out rectangles divided into cells and a jumbled listing of terms that need to be categorized by row and column.
28. **Approximate Analogies** – Students provide the second half of an analogy (A is to B as X is to Y).
29. **Assignment Assessments** – Students give feedback on their homework assignments, and evaluate them as learning tools.

30. **Group-Work Evaluations** – Questionnaires asking how effective group work has been in the class.
31. **Pair-Share-Repeat** – After a pair-share experience, ask students to find a new partner and debrief the wisdom of the *old* partnership to this *new* partner.
32. **Wisdom of Another** – After any individual brainstorm or creative activity, partner students up to share their results. Then, call for volunteers of students who found their partner’s work to be interesting or exemplary. Students are sometimes more willing to share in plenary the work of fellow students than their own work.
33. **Peer Review Writing Task** – To assist students with writing assignments, encourage them to exchange drafts with a partner. The partner reads the essay and writes a three-paragraph response: the first paragraph outlines the strengths of the essay, the second paragraph discusses the essay’s problems, and the third paragraph is a description of what the partner would focus on in revision, if it were her essay.
34. **Psychoanalysis** – Students get into pairs and interview one another about a recent learning unit. The focus, however, is upon analysis of the material rather than rote memorization. Sample Interview Questions: Can you describe to me the topic that you would like to analyze today? What were your attitudes/beliefs before this topic? How did your attitudes/beliefs change after learning about this topic? How will/have your actions/decisions altered based on your learning of this topic? How have your perceptions of others/events changed?
35. **Jigsaw (Group Experts)** – Give each group a different topic. Re-mix groups with one planted “expert” on each topic, who now has to teach his new group.
36. **Board Rotation** – Assign groups of students to each of the boards you have set up in the room (four or more works best), and assign one topic/question per board. After each group writes an answer, they rotate to the next board and write their answer below the first, and so on around the room.
37. **Pick the Winner** – Divide the class into groups and have all groups work on the same problem and record an answer/strategy on paper. Then, ask groups to switch with a nearby group, and evaluate *their* answer. After a few minutes, allow each set of groups to merge and ask them to select the better answer from the two choices, which will be presented to the class as a whole.
38. **Build From Restricted Components** – Provide limited resources (or a discrete list of ideas that must be used) and either literally or figuratively dump them on the table, asking students in groups to construct a solution using only these things (note: may be familiar from the *Apollo 13* movie). If possible, provide red herrings, and ask students to construct a solution using the minimum amount of items possible.
39. **Ranking Alternatives** – Teacher gives a situation, everyone thinks up as many alternative courses of action (or explanations of the situation) as possible. Compile list. In groups, now rank them by preference.
40. **Simulation** – Place the class into a long-term simulation (like as a business) to enable Problem-Based Learning (PBL).
41. **Six Degrees of “RNA Transcription Errors”** – Like the parlor game “Six Degrees of Kevin Bacon” (in which actors are linked by joint projects), you provide groups with a conceptual start point and challenge them to leap to a given concept in six moves or fewer. One student judge in each group determines if each leap is fair and records the nature of the leaps for reporting back to the class.
42. **Scrabble** – Use the chapter (or course) title as the pool of letters from which to make words (e.g., mitochondrial dna) and allow teams to brainstorm as many words as possible from that list, but all words must be relevant to this test. Variation: actually play scrabble on boards afterward.
43. **Double-Entry Journals** – Students note first the important ideas from reading, and then respond personally.

44. **Annotated Portfolios** – Student turns in creative work, with student’s explanation of the work in relation to the course content and goals.
45. **Student-Generated Test Questions** – Students create likely exam questions and model the answers.  
Variation: same activity, but with students in teams, taking each others’ quizzes.
46. **Minute Paper Shuffle** – Ask students to write a relevant question about the material, using no more than a minute, and collect them all. Shuffle and re-distribute, asking each student to answer his new question. Can be continued a second or third round with the same questions.
47. **Anonymous Peer Feedback** – For student presentations or group projects, encourage frank feedback from the observing students by asking them to rip up a page into quarters and dedicating comments to each presenter. Multiple variations are possible in “forcing” particular types of comments (i.e., require two compliments and two instances of constructive feedback). Then, ask students to create a pile of comments for Student X, another pile for Student Y, and so on.
48. **Chalk Talk** – Ask students to go to multiple boards around the room to brainstorm answers to a prompt/assignment, but disallow all talking. Can also be done in groups.