

Active Learning Techniques

Name of Activity	Helps address	Quick Description
Background knowledge probe	<ul style="list-style-type: none"> • Gauging students' prior knowledge • Activating students' prior knowledge. • Identifying a starting point. 	<p>Before starting a new topic, instructor makes a list of concepts that students should know about. The instructor writes either open ended questions or short-answer questions on the board or a slide.</p> <p>Students answer the questions individually, then compare their answers in pairs/groups (think-Pair-Share). Instructor might need to be prepared to review material before moving on to intended new concepts.</p> <p>Technology tools such as Socrative or Padlet may be helpful.</p>
Artifact	<ul style="list-style-type: none"> • Gauging students' prior knowledge • Activating students' prior knowledge. • Identifying a starting point. 	<p>Instructor identifies a concept she wants students to discuss and that lends itself to visual representations (photos, graphs, drawings, etc.). The instructor divides the class into groups of 4-5 students and gives each group a different artifact. Students are then asked to examine the artifact and answer a question or a series of questions.</p> <p>Students report to the whole class. This could be done by posting slides on Google slides, responding on Canvas, or Padlet.</p> <p>The instructor can also use a quote, a formula, statistical data and facts as representations</p>
Round Robin	<ul style="list-style-type: none"> • Brainstorming to generate ideas. • Gauging students' prior knowledge • Activating students' accurate prior knowledge. 	<p>Students are split into groups of 4-6. The group members take turns responding to the prompt. Students are asked to not interrupt each other. The flow of round robin discourages elaboration or evaluation of responses but provides an opportunity for lots of ideas. The students stop once they have all given ideas.</p> <p>Other activities such as "Classify". "Affinity Grouping", or "Graph the Relationship" could be used as follow ups.</p>
Buzz Groups	<ul style="list-style-type: none"> • Generating information and ideas • Activating prior knowledge 	<p>Break the students into groups of 4-6 and announce the prompt *question, problem, case, etc.) and the time limit. The groups discuss the prompt and the instructor can walk around to make sure that the groups are still engaged. After group discussion, move to whole class discussion. At this point, about discrepancies in understanding. Provide feedback to correct inaccurate knowledge or supplement insufficient one.</p> <p>This activity allows students to practice their comments which ultimately makes the whole class discussion richer.</p>
Group Grid	<ul style="list-style-type: none"> • Clarify categories and sorting skills 	<p>Instructor selects two or more categories that organize course information and generates a list of items that belong to each category. Students are given a blank grid (# of categories) and are asked to sort the list and assign the information to a grid. To make the activity more complex, the columns and rows can have superordinate concepts and students are given lists of superordinate terms that need to be organized.</p>

Affinity Grouping	<ul style="list-style-type: none"> • Break down complicated topics and work with the broken-down parts. 	<p>Instructor chooses a topic that can generate many ideas through brainstorming. The instructor gives students several index cards or slips of paper and asks them to write one idea per slip of paper. The students then split into groups and each group silently brainstorms the topic of the group. When the time is up, allow students to spread out the ideas that were brainstormed, to discuss them and then to arrange them into related groups.</p> <p>Students can use a brainstorming wall like Padlet to work of this activity.</p>
Team Matrix	<ul style="list-style-type: none"> • Finding difference between closely related concepts. Helpful if students mix up shared and uncommon attributes. 	<p>Choose two or three concepts that are related and the students tend to get mixed up. Pair the students up and give them a blank matrix. Students fill out the matrix.</p> <p>Have a class discussion and compare the completed matrices.</p>
Sequence Chains	<ul style="list-style-type: none"> • Better understanding of processes. Organize information 	<p>Students are asked to create a visual map of events to show what has happened. Instructor can either provide the students with the list of events, or ask the students to come up with the events.</p> <p>Group discussion can follow.</p>
Word Webs	<ul style="list-style-type: none"> • Mapping out relationships that show destination and sites along the way 	<p>A word or phrase is put at the center of a concept map. Students are asked to come up with ideas and organize them in sets of related items. Students are then asked to describe the relationships and to justify their reasoning.</p>
Team concept maps	<ul style="list-style-type: none"> • assessing prior knowledge, reviewing knowledge, creating new ideas 	<p>Students work in small groups to draw a diagram that represents their understanding of a concept, process or the main ideas of the lecture. It may be helpful to brainstorm ideas first as a larger group, and then have students organize the brainstormed ideas into a meaningful graphic (the instructor may or may not provide the graphic shape). Consider how you will handle the shared writing space, perhaps as handouts, flipcharts on the wall, or computer/mobile apps like Simple Minds or Popplet.</p>

Reference

Barkley, E. F. (2009). Student engagement techniques: A handbook for college faculty. John Wiley & Sons.
 Barkley, E. F., Cross, K. P., & Major, C. H. (2014). Collaborative learning techniques: A handbook for college faculty. John Wiley & Sons.