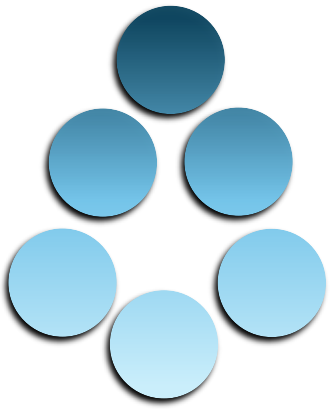
# Active Learning Techniques & Activities

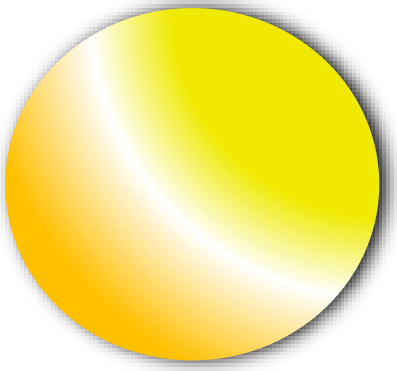


## ABSORB

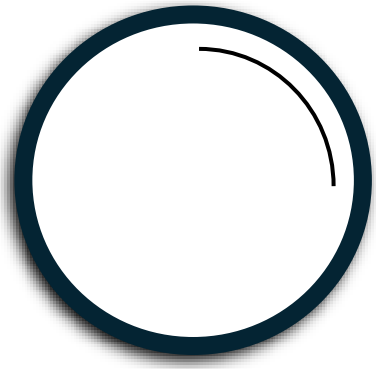
- ***Lecture***-Tradition, Didactic presentation of information; can incorporate A.I. Techniques throughout
- ***Panel***- Group Presentation designed to highlight a variety of perspectives.
- ***Debate***- Group discussion designed to persuade others to a point of view.
- ***Reading-*** Consumption of Information in a written format; typically done as a solo learner but can be aloud with a group.

- ***Pause of Reflection***-Simple prompt for learners to reflect. Can be in response to a piece of content, a question or idea.
- ***The Pause Procedure***- Pause for 2 minutes every 12 to 18 minutes to reflect on notes and re organize. Encourages learners to consider their understanding of the lecture material, including its organization. Provides an opportunity for questioning and clarification.
- ***Think Pair Share***- ask learners to think or write about an answer for one minute. Turn to a peer to discuss their responses for two minutes. Share with larger group and follow up with faculty explanation. Helps learners articulate newly formed mental connections.

## REFLECT



- ***Case Based learning***- contextually rich dilemma or situation requiring extensive analysis AND application of content previously learned by other means. Can be engaged in a group or alone.
- ***Game Based Learning*** -present content in a format and structure which includes game – based approaches, such as competition, scoring, time-limit, and clear rules.
- ***Categorizing grids***-Present learners with a grid made up of several important categories and a list of scrambled items. Learners quickly sort the terms into the correct categories in the grid. Ask volunteers to share their grid and answer questions that arise. Allows learners to express and interrogate the distinctions they see within the field or related items and helps instructors identify misconceptions.
- ***Concept maps-*** Have learners create a concept map, identify the key concept to be mapped in smaller groups or larger groups. Ask learners to determine the general relationship between the concepts and to arrange them two at a time, drawing arrows between the related concepts and labeling with a short phase to describe the relationship. Helps learners examine the and strengthen the organization within their mental model. Can emphasize the possibility of multiple right answers.



## EXPLORE

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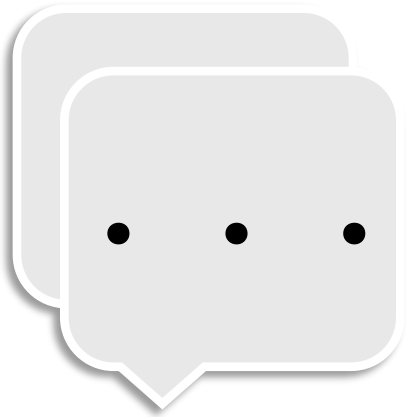
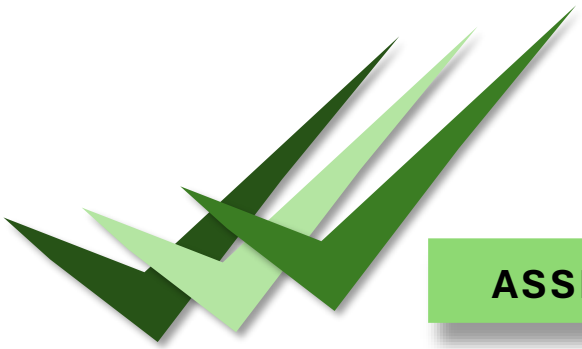


## EXPLAIN

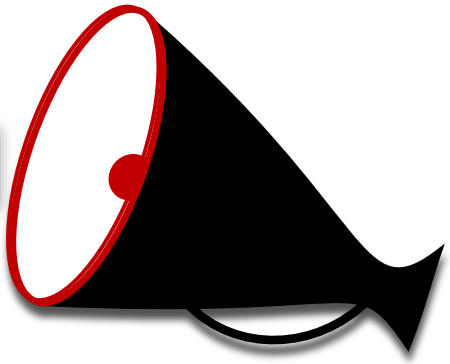
- ***Demonstrations***- ask learners to predict the result of a demonstration, briefly discussing it with a peer. After the demonstration, ask them to discuss the observed result and how it may have differed from their prediction. Follow up with a faculty explanation. Evaluate the learners understanding of a system by predicting an outcome. If incorrect, it helps them see the misconceptions and thus prompt them to restructure their mental model.
- ***Role Play***- Learners are provided with scenarios in which to practice new skills. Switching roles allows for learners to understand more than one point of view.
- ***Simulation***- Learners engage in contexts which mimic real-world scenarios to allow applications of skills.
- ***Standardized Patients***- Learner's practice skills on trained patient actors
- ***Strip Sequence***- Give learners the steps in a process on strips of paper that are jumbled. Ask them to work together to reconstruct the proper sequence. Strengthens learners logical thinking processes and evaluates their mental model of a process.



## ASSESS

- ***Minute Paper***- ask learners a question that requires them to reflect on their learning or to engage in critical thinking. Have them write for one minute. Ask learners to share responses to stimulate discussion or collect all responses to inform future education. Encourage learners to articulate and examine newly formed connections.
- ***Peer Instruction*** – Learners are tasked with learning a concept and teaching it to others.
- ***Jigsaw-*** 1. The faculty devised four assignments, one for each of fours teams. Each team then prepares one of the assignments. 2.) Once each team is prepared, the learners are divided into four new groups. Each group will have one team member from each of the teams. Each member of the group is responsible for teaching the rest of the group that he/she has learned from his/her team assignment. 3.) The group then puts all the pieces together and completes a group task (a synthesis activity) that can only be answered once all the team pieces are together. This latter part is crucial to the technique. This might be a case study, a follow up question, etc.

## ACT



- ***Retrieval Practice***- Pause for two or three minutes every 15 minutes. Have learners write everything they can remember from preceding class segment. Encouraging questions. Prompt learners to retrieve information from memory, which improves long-term memory, ability to learn subsequent material, and ability to translate information to new domains.
- ***Fishbowl***-Learners are separated into an inner and outer circle. In the inner circle or fishbowl, learners have a discussion; learners in the outer circle listen to the discussion and take notes.
- ***Student-generated test questions***- Challenge learners to create test questions corresponding to learning objectives.
- ***Peer-to-Peer grading***-learners assess the work of other learners or themselves.