Active Learning Strategies

Aligning Active Learning Strategies with Levels of Learning in Bloom's Taxonomy

This resource offers specific activities with descriptions. Many of the activities in this resource offer a structure that can be used with many questions, problems, or tasks. So, the alignment with levels of learning is adaptable to your own learning outcomes. Bloom's taxonomy is a common taxonomy to assist with identifying the action verb defining a learning outcome. Bloom's Taxonomy Learning Activities and Assessments. Centre for Teaching Excellence, University of Waterloo is a resource that offers examples of alignment of activities and assessments with the levels of learning in Bloom's taxonomy. We offer some examples of levels of learning based on the structure of the activities, in the different learning domains that apply. All activities apply to the cognitive domain, and most apply to the affective domain. The activities below are ordered increasingly with respect to complexity and depth of learning.

Multi-modality

Most of the active learning strategies in this resource can be used across modalities (e.g. online asynchronous, online synchronous, and in-person). If an activity is *restricted* to a particular modality, or modalities, we will use the following icons to highlight this:

 online asynchronous   online synchronous   in-person

Consider the following strategies for adapting each of the applicable activities to the corresponding modality:

 online asynchronous – There are a variety of tools in eClass and external that can be used, including discussion forums, journals, Wikis, questionnaires, quizzes, and shareable collaborative documents, like Google Docs, as well as audio or video recording.

 online synchronous – There are a variety of tools in Zoom or Teams and external that can be used, including chat, annotate, whiteboard, reactions, polls, and breakout rooms, as well as shareable collaborative documents, like Google Docs.

 in-person – There are a variety of tools that can be used including flip charts, boards, cue cards, as well as applications for smartphones like iClicker, Microsoft Forms, Mentimeter, and Padlet.

Activities

Icebreaker Grab Bag

"Icebreakers are typically quick, low-stakes activities that encourage students to become more familiar with their peers. Many instructors do an icebreaker on the first day of class to learn students' names. However, frequent use of icebreakers on a daily or weekly basis can assist in building community as your students come to know one another better. Having all students speak and participate at the beginning of each class can also positively impact overall participation in classroom discussion. This collection of icebreakers provides a variety of activities to choose from and implement throughout the semester." (Abdoo, 2020)
Levels of Learning: Understand, Responding, Set

Syllabus or Reading(s) Scavenger Hunt

Students are provided with specific prompts or questions to explore the course syllabus or selected readings. Responses are then used to create a "scavenger hunt", where students ask each other questions to try to find specific information. The scavenger hunt portion would then be tailored to these responses where students must find this information and share it with their peers.
Levels of Learning: Understand, Responding, Set

Two-Column Method

The instructor helps students more fully consider a problem, issue, or concept with a two-column method of generating and recording answers to a prompt. Draw two columns on the board/screen/document with "Looks/Sounds Like" and "Doesn't Look/Sound Like" and ask the participants for ideas, observations, recalling of presentation information that will support one column or the other.
Levels of Learning: Remember, Receiving, Set

Focused Reading Notes

When assigning a reading, accompany the reading with 3-5 themes or concepts for the students to look for in the text. Students can create columns for each theme/concept and write keywords, thoughts, phrases, and evidence from the reading that connects with the theme/concept.
Levels of Learning: Understand, Receiving, Set

Word Cloud

A word cloud is a visual representation of text, often single words. As more words are produced, greater prominence is given to words that appear more frequently. Pose a question to students as a warm-up, recall, or check-in activity via Microsoft Forms or Mentimeter, which are tools with the capability of creating word clouds from responses students share via the application from their own device. Sharing and discussion can follow this visual representation.
Levels of Learning: Understand, Receiving, Set

Contemporary Issues Journal

Students make connections between course material and recent events in the news, writing in a journal, or posting on a blog, how course material applies to current events. You may consider structuring the entries as a three-part entry: (1) date of the journal entry and citations of the news source, (2) a description or summary of the article (who, what, where, when, why, how), and (3) explain the principles, ideas, and concepts from the course that the event reflects.
Levels of Learning: Understand, Receiving, Set

Snowball Fight

This short activity can be used to encourage students to ask questions or attempt an answer at a challenging question. Once they have written their response, students make a ball with their piece of paper and start a snowball fight. After the snowball fight is over (you may need an air horn to bring it to an end), the teacher picks up the snowballs to answer questions, use them to stimulate discussion, or instruct students to pick a snowball and do something with the information they find on their snowball.
Levels of Learning: Understand, Responding, Set

Letters

Students assume the identity of an important or famous person and write a letter explaining their thoughts on an issue, theory, or controversy to another important or famous person who holds a different perspective.
Levels of Learning: Understand, Responding, Set

Heads Together

Ask students to form groups of four. Pose a question. Heads together, they discuss the answer for 1 or 2 minutes. Randomly call on a few groups to provide their answer. Because students report on their group's discussion as opposed to their own thoughts, this activity can make it easier on them to speak up.
Levels of Learning: Understand, Responding, Set

Group Discussion with Passport

Students form groups to discuss an issue. To encourage active listening, students must paraphrase the key point of the last person who spoke before stating their opinion. Clearly capturing what the previous person has said gives the next speaker the 'passport' to state their point. If the paraphraser does not restate the previous accurately, clarification occurs before continuing.
Levels of Learning: Understand, Responding

Pass the "Pen"

Ask students to write up their point before passing the "pen" to the next person. In a larger class, the activity can be set up by row. At the beginning of class, this activity can be used to provide focus or check current levels of understanding. During the session, it can be used to collect examples or give students an opportunity to ask questions. It can also be used as an "exit ticket" to find out at the end of class one thing learned today.

Levels of Learning: Understand, Responding, Set

One Minute Paper

The one-minute paper is designed to help students realize what they know or do not know (i.e. "check for understanding"). Students are asked to write on the topic presented by the leader. Remind them it is most important that they put their thoughts in their own words, not that they produce a polished piece of writing. Common questions include "what did you learn today" and/or "what question(s) do you still have?"

Levels of Learning: Understand, Responding, Set

Group Survey

Each group member is surveyed to discover their position on an issue, problem, or topic. This process ensures that each member of the group is allowed to offer or state their point of view. A survey works best when opinions or views are briefly stated. Be sure to keep track of the results of the survey.

Levels of Learning: Understand, Responding, Set

Think-Pair-Share

This process requires three stages. The students should be given a question, concept, or problem and then encouraged to think about it alone for a (short) designated amount of time. Then they pair with another student and discuss what they found individually for an additional period of time. Lastly, the pairs join the large group and discuss their conclusions as a whole.

Levels of Learning: Understand, Responding, Set

Summaries

Students, individually or as a group, summarize some aspect of a course's activities, discussions, or readings. This process reinforces the material and provides additional perspectives from the students themselves about the course themes and foci. This can be particularly important in a classroom that is highly interactive, one that has many students, or one in which students are divided up into smaller groups for a portion of their work.

Levels of Learning: Understand, Responding, Set

Lecture Wrapper

Lecture Wrapper is a tool for teaching students self-monitoring behavior as they identify key points from a lecture and then compare their points to the instructor's list of points.

Levels of Learning: Understand, Responding, Set

Ask-it Basket

Students submit questions and/or statements anonymously to a 'basket' or repository; engagement occurs when students pick from the basket to ask the question to the group or begin a discussion on a topic.

Levels of Learning: Understand, Responding, Set

Exit Ticket

Ask students what the take-home message from the class/module/session is or what is the muddiest point, that is, what is unclear or confusing.

Levels of Learning: Understand, Responding, Set

Poster Presentation

Students create posters that summarize and describe key insights and learnings from a unit, module, or entire course. Criteria can be modified to address core competencies and/or intended learning outcomes (basic outline: What? So What? Now What?).

Levels of Learning: Understand, Responding, Set

Insights-Resources-Applications (IRAs)

This written activity can be applied to a reading, concept, topic, or theme covered in the course. The activity consists of three parts: **Insights** – students describe their new understandings or perceptions connected to the reading/concept/topic or theme of the course. **Resources** – students find and cite at least one additional resource that relates to the reading/concept/topic or theme of the course. **Application** – students describe an example from their own personal experience that relates to the reading/concept/topic or theme of the course.

Levels of Learning: Understand, Responding or Valuing, Set

Frames

Give your students a template or collection of sentence stems that provide the shape of a short essay but do not provide content. Students complete sentences, or fill in the template, expressing their ideas in their own words, essentially filling in the 'content'.

Levels of Learning: Apply, Responding, Set

Gallery Walk

The instructor places a flipchart with a question in different areas of the classroom. Students are divided into groups and move from station to station to discuss answer(s) to each question. Each

group develops a consensus and writes their answer on each flipchart. When the flipchart has an answer already written by a previous group, the next group revises, expands or illustrates with additional information. Different colour markers can be used for each group.

Levels of Learning: Apply, Valuing, Set

Role Play

A dramatized case study: a spontaneous portrayal (acting out) of a situation, condition, or circumstance by elected members of a learning group. Can be live or recorded.

Levels of Learning: Apply, Valuing, Guided Response

Structured Problem Solving

Identify the steps in solving the particular problem and separate the students into groups. Because the steps for solving problems are given, it is easier for the students to handle large complex problems, and they have greater confidence. Assign them a sample problem and give them a specific time period, at the end of which the group must have reached a consensus for the answer. Ask the students to report their solution and explain the steps that led to their answer. This strategy is most helpful for larger multi step problems.

Level of Learning: Apply, Valuing, Mechanism

Consensus Groups

Ask small groups of students to discuss an assigned topic with the goal of coming to a consensus on that issue. Each team presents their group's consensus to the whole class.

Levels of Learning: Analyze, Valuing, Set

Cubing

Students look at a stimulus from varied perspectives and respond to a topic from six different directions (analogous to the six sides of a cube): (1) describe it, (2) compare it, (3) associate it, (4) analyze it, (5) apply it, and (6) argue for and against it.

Levels of Learning: Apply, Analyze, Evaluate, Valuing

Brainstorm, Categorize & Roam

Ask students to form groups and brainstorm ideas (ask for 10 to 15 key ideas) on a given topic for about 5 minutes. They record each idea on Post-it notes, flash cards, or collaborative document and to categorize them and label the categories in a manner they can explain. After selecting one student per group to remain with the chart or in the breakout room to explain it, all other students roam the room(s)/document to study the other groups' charts.

Levels of Learning: Analyze, Organization

Dominant Narratives

"A dominant narrative is an explanation or story that is told in service of the dominant social group's interests and ideologies. It usually achieves dominance through repetition, the apparent authority of the speaker (often accorded to speakers who represent the dominant social groups), and the silencing of alternative accounts. Because dominant narratives are so normalized through their repetition and authority, they have the illusion of being objective and apolitical, when in fact they are neither. This discussion guide will help students recognize dominant narratives, how they are perpetuated, and how and whom they benefit/harm." (Abdoo, 2020)

Levels of Learning: Understand, Analyze, Valuing or Responding

Quotes

Identify different quotes from a reading and ask students to contextualize and/or analyze the quote, connecting to course concepts.

Levels of Learning: Analyze, Valuing or Responding

Group Lecture Notes

This is a method of getting the students to work together to review and augment their lecture notes in an organized way. In small groups, have the students share their notes. Encourage other students to interject with details missed or questions about the topic. The groups combine all their notes and decide what information is critical and give it proper emphasis. Groups also compare notes for further discussion and refinement.

Levels of Learning: Analyze, Organization, Set

Concept Mapping

Concept maps present the relationship among connected ideas and concepts. This mapping encourages students to see the overall picture and helps bring focus away from minute details and back to the main ideas. Have the students to identify the central word, concept, or question around which to build the map. Extend branches out from the central circle that includes all the subtopics from the main idea. Continue to add additional branches with related topics and circle groups of branches that are linked. End with an overall discussion of the topic.

Levels of Learning: Analyze, Organization, Set

Debate

A formally structured discussion with two teams arguing opposing side of a topic.

Levels of Learning: Analyze, Evaluate, Valuing, Organization, Set

Reading Group

Provide each student, or group of students, with a prompt to accompany a reading and ask students to prepare for a discussion (seminar) by marking passages they wish to discuss and writing a short response, connecting the passages to the prompt they were given. In class/module, students read

their passage and share their thoughts, engaging in discussion with peers. Alternatively, or in addition, you could ask your students to prepare discussions questions to pose to their peers.

Levels of Learning: Analyze, Create, Responding

Believing and Doubting

Ask your students to read the reading with two different perspectives: "Believing" – student reads the text empathetically and makes a conscious effort to understand and appreciate the author's points, values, beliefs, and perspective. The student makes a list of their own points, supporting the author's perspective and writes an argument 'for'. "Doubting" – student reads the same text looking for weaknesses, makes a list of points refuting the author's points, values, beliefs, and perspectives, and writes an argument 'against'.

Levels of Learning: Evaluate, Valuing

Analytic Teams

Team members or individuals assume roles when critically reading an assigned reading/assignment, listening to a lecture, or watching videos. The roles include 'summarizer', 'connector', 'proponent' and 'critic'.

Levels of Learning: Evaluate, Valuing

Case Studies

A type of simulation aimed at giving learners experience in the sort of decision making required later. Instructors design a case that involves an in-depth analysis of a single situation or set of circumstances over time and requires analysis, problem solving, decision-making and justification on the part of the students. Case studies often involve collaborative learning, where students work on the case study in teams, but this can also be an individual activity. For advanced learners, you could ask students to create their own cases and exchange with other students to analyze and respond to a case.

Levels of Learning: Apply, Analyze, Evaluate, Create, Valuing, Organization, Origination

KWL

Helps students to activate prior knowledge and link to new information to make connections with what is already known. Title 3 columns: What I **K**now; What I **W**ant to know; What I **L**earned. Toward the end of the session go back to the chart and have students go back to the K column to see if any info needs to be corrected, see if there are any questions left unanswered, and then complete the L column.

Levels of Learning: Evaluate, Organization, Set

Make & Take a Practice Quiz

Divide the students into two or more groups. Instruct each group to make a practice quiz for another group and provide answers to their own quiz on a separate document. Be sure to provide examples but allow them to be creative. Ask the groups to exchange quizzes and give them time to complete

the other group's quiz. Then, have each group compare their answers with the answers that the other group previously composed. Be sure to allow for time to discuss questions that remain unclear.

Levels of Learning: Create and Evaluate

Send-a-Problem

Students form groups. On a flash card, each student writes a question on one side and the answer on the other. As a group, they check all cards for accuracy. The cards are sent to another group to be answered orally inside that group. If questions are confusing, groups can send one member to the table of origin for clarification.

Levels of Learning: Create and Evaluate

Brainstorm

A group effort to generate new ideas for creative problem solving; thoughts of one participant stimulate new direction and thoughts in another.

Levels of Learning: Create, Responding, Guided Response

JIGSAW

This is a method of making the group as a whole dependent on subgroups. A large group is divided into 2 or more groups (3-4/group) and each group is assigned a topic/step/task in a problem/concept – therefore becoming the "expert". Students then move from their expert group to a new jigsaw group in which each student acts as the only expert in their specific topic and teaches the material to the rest of the new group. Each new jigsaw group consists of at least one member from each of the original groups.

Levels of Learning: Create, Characterization, Mechanism

Simulation

A form of experiential learning that provides learners with a real-world-like opportunity to develop and practice their knowledge and skills but in a simulated environment.

Levels of Learning: Create, Characterization, Adaptation

Proclamations

Students identify and analyze a problematic situation in the local community. Then students write a speech as a government official that persuades others of the urgency of the problem and proposes strategies and solutions.

Levels of Learning: Evaluate, Create, Characterization