Active Learning Strategies

What is Active Learning?

Students are engaged in active learning when they…

- practice higher order thinking like evaluation or analysis,
- construct knowledge instead of passively receiving it,
- create, compose, or share what they are learning, or
- have the freedom to extend what they've learned and apply it to a new context….

Why Active Learning?

Active learning strategies may be exactly what your classroom needs if…

- students have been researching or reading in front of a screen for a while,
- students have been in the midst of a long writing process and need to get on their feet to help with brainstorming or fuel the revision process,
- students are struggling with difficult concepts or challenging reading passages and needed to collaborate with other students to work out the "tricky bits,"
- students are energized by a new topic or discovery and are eager to learn more, make connections to their community, or create something new in response, and/or
- a lesson has raised controversial or complicated issues, and you want to provide a safe, structured forum for students to communicate effectively and work through difficult or divisive topics.

What does Active Learning look like?

Activities that engage students in active learning can range from a two-minute activity to a two-week long project requiring investigation, analysis, and effective, skillful communication. The strategies on the following pages are organized according to types of instructional models.

Teacher Facilitated

The following activities are teacher led, meaning that they fit in well when direct instruction is necessary. In general, these activities can be incorporated quickly and are flexible enough that they can be used for a whole class, a smaller group of students, or even just a few students in conference with you as a teacher. They require little advance planning, so they can be the perfect spur of the moment solution to a low energy or frustrated learning environment.

Conversation collage	The conversation collage provides students with a low risk, physically active way to contribute to a class discussion. Provide students with a topic, quotation, question, image, or scenario for consideration and give them time to process individually or in small groups. When they are ready, students should approach the whiteboard on their own time and write down their thoughts. Encourage students to share their initial thoughts, read others' ideas, then write additional responses or even write a reply to classmates. Once everyone has contributed, guide the class through a discussion of all the responses. This strategy encourages participation and provides a space for students to take risks with their thinking. *Option*: spread butcher paper over several desks or a long table. Write a question or idea in the center of the paper, then direct students to reply on the paper - to both the question and to one another's responses - without speaking aloud to one another.
Parking lot	This is an easy strategy to use when students are listening to a lecture or mini-lesson, or if they are working with an audio or video resource as a group. Place 1-2 sticky notes on each student's desk. As they listen, watch, or take notes, students should write down questions they have, points they are confused about, or ideas that excite or interest them - one per sticky note. Throughout the lesson, students get up and place their sticky notes on the "parking lot" - a sheet of paper on the wall that serves as a holding place for all their ideas. You can even designate multiple parking lots around the room: one for questions, one for personal connections, and another for specific reactions. At an appropriate stopping point or the end of the lesson, lead the group through a discussion of their sticky note questions and ideas, allowing students to contribute to the conversation as they are comfortable.

Minute paper or exit ticket	Minute papers are active learning strategies that also serve as formative assessments to gauge student engagement and understanding. At an appropriate point during sustained independent work, ask students to take out a blank sheet of paper or open a Google doc. Then, state the topic or question you want students to address. For example, "Today, we've all been researching emancipation and equal rights. List as many key events and figures as you can remember. You have two minutes – go!" *Options*: Once time is up for the minute paper, ask students to combine their responses in groups or make a list on the board to discuss. Alternatively, make the activity an "exit ticket" by asking students to respond to a question or solve a short problem before leaving the classroom.
Think-pair-share	Have students work individually on a problem or reflect on a passage. Students then compare their responses with a partner and synthesize a joint solution to share with the entire class.
Review games	Develop a game to review important concepts. Below are a few options: • Make your own BINGO cards here • Create your own Jeopardy game here • Create an easy online review game at Kahoot (Students compete in teams and answer with their cell phones) • No lead time? Split students into teams and ask them questions (allowing them to confer before answering). Up the stakes by offering a reward to the winning team. • Want students to own the assessment process? Ask them to create the review questions (and provide answers) for you to use for any of the above games.

Student Led for Small or Large Groups

These active learning strategies are student-centered; while you may still provide the content, students drive the analysis and discussion.

"Golden Line" (or golden fact or golden problem)	This strategy centers on student choice. Students choose a "golden line" from a passage they have read, a video they have watched, research they have done, their own writing, or a problem they are working through (the "line" can take many forms). You can collect these golden lines in a variety of ways: on the board, on strips of paper in a hat, on a Google doc, etc. Once collected, students lead a discussion with a small or large group about the significance of that golden line and why it is worthy of discussion, explanation, or debate. Example prompts: • Choose a golden line from a section of literature and share what makes it "golden" (it contains strong imagery or vivid diction, it conveys a theme or a shocking/controversial idea, etc.) • Choose a golden line from an interview and share what makes it "golden." (Does it provide a key fact? Does it capture the viewer's attention? Does it provide a starting point for debate or prove a point?) • Choose a "golden problem" from a science lab or experiment and share what makes it "golden." • Choose a golden moment or golden figure from a historical event or period and explain why it is "golden." (What makes it pivotal? What were the consequences of this golden moment? Or, how did this historical figure drive policy?)
Magic Hat discussions	Divide students into small groups or pairs. Have them draw a topic, passage, question, statement, etc. from a hat. After they have time to discuss and plan, students are tasked with leading a larger group or whole class discussion of the topic they drew from the hat.

Round-robin and reflection	Place students in small groups. Each member of the group receives a different section from a resource and is tasked with a different role for analyzing, evaluating, or otherwise making sense of the resource. Students annotate (mark up) the resource in front of them according to the dictates of their roles. After a time, the students rotate resources, repeating their tasks again with the new material. Once the rotation is complete, students reflect on and discuss their discoveries. *Example*: A group of four students has four separate passages from a novel they have been reading. Student A is tasked with annotating for imagery; student B is tasked with annotating for figurative language; student C annotates for thematic elements; student D annotates for character developments. Students rotate through the passages, performing their tasks with each. After they have worked on all four passages, students consider the patterns emerging and draw conclusions about the author's style and the effect of literary features.
Jigsaw	In this technique, a general topic is divided into smaller, interrelated pieces (e.g., a puzzle is divided into pieces). Each member of a team is assigned to read and become an expert on a different topic. After each person has become an expert on their piece of the puzzle, they teach the other team members about that puzzle piece. Finally, after each person has finished teaching, the puzzle has been reassembled, and everyone on the team knows something important about every piece of the puzzle. *Example*: a series of quests on Arthur Miller's The Crucible asks small groups to research and become experts on contextual elements for the play: Arthur Miller, McCarthyism, and the Salem Witch Trials. These small groups break up and form new groups that include an expert from each topic. In these new groups, student experts share what they have learned and work together to use the contextual information to analyze scenes from the play.
Case studies	Break students into pairs or small groups and assign each a case study (real-life stories that describe what happened to a community, family, school, industry, or individual). Ask each group to make connections between the case study and the subject that they've been exploring in a quest; each small group may then share their discoveries with the larger group. This strategy asks them to integrate their classroom knowledge with their knowledge of real-world situations, actions, and consequences.

Socratic seminar	Socratic seminars are student-directed, large group discussions that are driven by the power of inquiry and questioning. Students provide the content for the discussion through questioning and maintain the flow and fruitfulness of the conversation. Successful seminars place mentors as observers only; as such, students may need scaffolding when it comes to preparation for the seminar (developing questions, being prepared with research, etc.) and learning the skills needed to participate in an academic conversation. *Fishbowl option*: divide students into two groups: an inner circle and outer circle. The inner circle leads a discussion while the outer observes, reflects, and takes notes. After a time, the circles switch positions and the next group takes up the reins of the discussion. You can find a more detailed explanation of Socratic seminars and strategies for incorporating them here and here.
Student experts	Individual students or small groups choose or are assigned a topic to teach to their peers. Depending on your class and students, this might look like… **Passage experts**: students analyze a passage or article and lead their peers through a lesson and discussion of its significance and key features. **Concept experts**: students research a new concept (perhaps one that provides background knowledge or vocabulary for an upcoming quest) and teach the concept to their peers. **Issue experts**: students research a controversial issue, examining both sides of the argument, and present the issue for debate and consideration to the rest of the class
Student designed self-assessment	Students brainstorm and complete a self-assessment. Students can work in groups, in conjunction with you as mentor, to devise the skills and concepts the assessment should measure. Students may also develop a rubric to measure their success with the assessment

Reinterpretation of text	Students take a resource and change its media. The possibilities for this are broad and can encompass everything from long term projects to short, spur of the moment activities. *Example*: Students take primary sources, such as several historical letters, and write a short story retelling the experiences of the letter writer from a third person perspective as historical fiction. *Example*: Students watch a video explaining mitosis and meiosis then create poems explaining the processes of cell replication. *Example*: Students take chapters from novels and rewrite them as short plays, performing them for a larger group.

Active Learning Around the Room

These active learning strategies all share one additional benefit: students have to stand up to do them. Sometimes active learning also means being physically active.

Research or activity stations	Students move in small groups around the room, doing exercises or research at stations. As they work in small groups at each station, they discuss and reflect on the material together. Once the journey around the room is complete, students will have had multiple chances to either practice a skill together or learn about a new concept from several resources. *Example:* a social sciences lesson includes a list of five articles which are challenging scholarly articles. Print out 3-4 copies of each article (depending on the number of students in your class) and create a reading station for each resource. Provide students with an active reading guide to use as they work through the stations in groups. *Example*: students have been learning about experimental design. Create 3-4 stations with hypotheses. At each station, the small group works together to outline an experiment to test the hypotheses. After each group has rotated through the stations, small groups share their ideas with the larger group.
Role-playing	Students "act out" a part or a position to get a better idea of the concepts and theories being discussed. Role-playing exercises can range from the simple to the complex.

Four corners	Four corners provides a structure for debate. It has the benefit of providing a low risk way for those who are hesitant to contribute verbally; it also allows students to show how their thinking changes by physically changing position in the room. Set up four corners in the room with four signs: Strongly Agree, Agree, Disagree, Strongly Disagree. You or a student should then make an arguable or controversial statement. Students move to the corner which indicates their feelings about the statement. Students can share their reasoning in support of their opinions and even change corners as they are persuaded by their peers' arguments. *Before and after option*: rather than having students debate their positions from the corners, ask them to remain silent. Do the four corners exercise before reading one or several resources on the issue, and then repeat the exercise after students have worked with the resources. Students can then share their opinions and discuss why they may have changed position since the first four corners exercise. *Corners option*: rather than "strongly agree," etc. label the corners of the room with contrasting statements. ("Climate change must be addressed by government policy"; "Private corporations should have the right to determine their own policies in response to climate change."; etc.)
Tableau vivant	Students create a "living picture" in response to a concept they have learned or a resource they are studying. *Example:* assign small groups moments from a historical event; each small group must create a tableau of the moment and the rest of the class must discover what moment they are recreating *Example*: after reading a section of a novel together, ask for a small group of students to create a tableau of a key conflict from what you've just read.
Forum theatre	Use theatre to depict a situation and then have students enter into the sketch to act out possible solutions. • Example: students watching a sketch on dysfunctional teams, might brainstorm possible suggestions for how to improve the team environment. Ask for volunteers to act out the updated scene.

Hands-On and Experiential Learning

Hands on technology	Students use technology such as simulation programs to get a deeper understanding of course concepts. For instance, students might use simulation software to design a simple device or use a statistical package for regression analysis. • How do you know if a chemical equation is balanced? What can you change to balance an equation? Play a game here to test your ideas! *Examples:* PhET Interactive Simulations project at the University of Colorado Boulder creates free interactive math and science simulations.
Experiential learning	This strategy can take a variety of forms. *Site visits*: As a mentor, plan site visits that allow students to see and experience applications of theories and concepts discussed in the class. *Experts:* If a site visit isn't possible, ask an expert to visit your classroom for a forum with your students. Or, consider providing an online forum to interview an expert in the field. Create a Google Meeting, schedule a phone call, or even email a list of students' questions.
Inquiry learning	With this strategy, students use an investigative process to discover concepts for themselves. After the instructor identifies an idea or concept for mastery, a question is posed that asks students to make observations, pose hypotheses, and speculate on conclusions. Then students share their thoughts and tie the activity back to the main idea/concept.

These strategies are yours to own and adapt for your students, so keep this resource close by as you plan. Have a few favorites? Make a list on a sticky note and keep them on your desk or filing cabinet!