

Residential to Remote: Active Learning Strategies by Instructional Modality

Active learning strategies can be used to engage students in the classroom, regardless of delivery method. Active learning and groupwork are not necessarily synonymous. Active learning engages students in intellectually processing course material and checking for understanding (for the instructor and student).

Basic Knowledge, Recall, and Understanding of Concepts/ Skills of Concepts/ Skills

Active Learning Strategy	Remote-Synchronous	Remote-Asynchronous	Physically Distanced Classroom
Pausing in Lecture Break up a synchronous presentation	Break up a lecture by stopping for a quick activity, such as responding to a question in chat, completing a sentence, or completing another task like polling, etc.	In recorded videos, insert points for students to pause and reflect on what was just said by completing an activity such as answering some quick questions using a quiz function.	Pause during the lecture to ask a question, give a poll, or ask students to identify the three things they have learned so far in the class.
Polling Student share feedback using polling or voting tools.	Students have 4 different colored cards with one letter (A, B, C, D) per card . Students hold the card up to the webcam when asked a question to display their answer. Use the polling feature in Zoom or another online poll to ask questions and show responses in real-time.	Have students make a choice identifying their choice in the LMS. Share results in a class announcement, email, or within the module.	Students use color-coded polling cards (or raise hands or stand up/vertical movement to indicate agreement). Cards are held up when asked a question to display their answer. Consider doing this online in a collaborative document or using i-Clicker Cloud.
Clearest / Muddiest point Ask students to answer: "What was the muddiest point in the ____?" (e.g., in the lecture, in the book, in the discussion, in the film)	Encourage students to identify any unclear or "muddy points". Muddiest points can be added in the chat or on a shared screen.	Pose a question in a discussion forum or other shared space or submit a video chat.	Use a post-it note, online poll or collaborative document to record a muddiest point. Instructor reviews and discusses with class.

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<p>Think-pair-share</p> <p>Numbered Heads Together Students form groups (2–4) and number off and discuss a question/concept. Instructor calls on students from a certain number to share.</p>	<p>Use breakout meeting rooms in MS Teams or Zoom to simulate small group discussions.</p>	<p>Pose an equivalent question to the asynchronous students, either in video or text, and ask the students to respond in a small group discussion forum. The group reports can be shared to the larger class discussion forum.</p>	<p>Set up small groups of 3-4 students in MS Teams or shared document to participate in discussion.</p> <p>Send pairs out of classroom for a socially distanced discussion with a set a return time for students to report back to the class. When sharing with class, project voices so all classmates hear.</p>
<p>Write-pair-share</p> <p>Instead of thinking then discussing, students write their thoughts, knowledge, etc., then share with a partner or group.</p>	<p>Use the chat feature in the LMS or MS Teams. Ask a question and let students reply with a brief response. Read responses out loud to the whole class.</p> <p>Could use meeting rooms in Zoom with a reporter to share out to class.</p>	<p>Assign partners and pose a question. Ask students to share ideas in the LMS discussion forum or chat, MS Teams, or Google document for the pair.</p>	<p>Assign partners in the classroom who can talk 6 ft apart. Alternatively, students can "talk" through texts using a shared google doc or slide show, when distance would make the volume in the room difficult for some students to learn.</p>
<p>Minute Paper</p> <p>Ask students to write, in one minute, the answer to either of these questions: "What was the most important thing you learned during this class?" "What important question remains to be answered?"</p>	<p>Pose a question or two in a discussion in the LMS and have students respond. Instructors may ask for some students to share a selection of responses or summary of their responses with the whole class.</p>	<p>Pose a question or two in a discussion in the LMS and have students respond. Instructors may follow up by sharing a selection of responses or summary of their responses with the whole class.</p>	<p>Pose a question or two and have students write a response in Word, students can email responses to the instructor at the end of class. Instructors may ask for some students to share a selection of responses or summary of their responses with the whole class.</p>
<p>Aha Wall</p> <p>Students share "aha" or "Eureka!" moments.</p>	<p>In real time ask students to post an "aha" in a class chat and use these to guide discussion or future instruction.</p>	<p>Ask students to post an "aha" in a discussion forum and use these to guide discussion or future instruction.</p>	<p>Tape poster boards on the wall and ask students to share ideas using post-it notes, adhering to social distancing directions. Or, each student has a handheld dry-erase board or their own dry-erase marker.</p>

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<p>Posters or Gallery Walk Images or student work is placed around the room like an art gallery.</p> <p>Dot Voting Students review posters and vote using dot stickers or markers.</p>	<p>Use online collaborative spaces (MS Teams, Google, Padlet, etc.) for small groups to create/share virtual posters and classmates can record ideas/votes.</p>	<p>Use online collaborative spaces (MS Teams, Google, Padlet, etc.) for small groups to create/share virtual posters. Peers review the posters and record ideas/votes and share with the instructor. The instructor shares with the class as part of the module's activities.</p>	<p>If allowed, place poster boards around the room. Dismiss one group of students to go separate posters and record a response. When they finish and return to their seats, dismiss a second group. Continue until the entire class has been able to record responses. Read/ review the posters with the class or save and use to start the following class period. This activity encourages movement, individual response, and can serve as an assessment of students' opinions or understanding (depending on the questions). You may need to think about options for students that are not moving around the room. One option is to consider using virtual poster boards.</p>
<p>Empty Outlines Instructor provides students with an empty/partially completed outline and gives them a limited amount of time to fill in the blank spaces. Students can work alone or in groups, depending on what is being assessed.</p>	<p>Create a set of class notes with blanks for important information and share on the LMS. Encourage students to fill in the blanks during the class session.</p>	<p>Create a set of class notes with blanks for important information and share on the LMS. When viewing course materials, students complete and annotate the notes.</p>	<p>Create a set of class notes with blanks for important information and share on the LMS. Encourage students to fill in the blanks during the class session.</p>

Application of Concepts

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<p>Directed Paraphrasing This technique provides visibility into student’s ability to translate highly specialized information into everyday language.</p> <p>Varied Voices After teaching a challenging topic, have students form groups of 4. Assign each group an audience (i.e., a seasoned professional in the field, an adult who knows nothing about the topic, a middle school student, a 1st grader). Students write a short explanatory paragraph about the topic so that their assigned audience would understand it. Students share with their group members – group members help clear up any misconceptions.</p>	<p>Use the chat feature in the LMS or MS Teams. Ask students to paraphrase theory, jargon, and other specialized language into “student-friendly” language.</p> <p>Read responses out loud to the whole class. Could also use meeting rooms with a reporter to share.</p>	<p>Assign partners and have students work together, asking them to share their ideas, in a the LMS discussion forum or chat, google document or email for the pair.</p>	<p>Assign partners in the classroom that can talk 6 ft apart. Alternatively, students can "talk" through texts using a shared google document or slide show, when distance would make the volume in the room difficult for some students to learn.</p>
<p>Human Tableau or Class Modeling Groups of students create a short video, “living” scene or model process to show what they know.</p>	<p>Students meet in a group area to write a short podcast or news story. Read the story to the class.</p>	<p>Students write a short podcast or news story. Students record the podcast or news story and post in the LMS.</p>	<p>Assign partners in the classroom that can talk six feet apart or write a script in a shared google document. Students read the story to the class.</p>
<p>Make a Prediction Individually or in small groups, students predict the outcome of an explanation or experiment based on current knowledge. Students share predictions, evidence and reasons for predictions in small groups. Students “justify” predictions before agreeing on a “correct” prediction.</p>	<p>Groups use breakout meeting rooms in Zoom or MS Teams to make predictions, provide two forms of evidence and rationale for the predictions. A representative from each group shares the group’s prediction and rationale with the class.</p>	<p>Groups use a discussion board or chat area in the LMS to make predictions and identify two forms of evidence and rationale for the predictions. Each group writes up a report and shares it on a class discussion board.</p>	<p>Groups use a google or MS Teams document or slides to record predictions, identify two forms of evidence and rationale. Groups present their work to the class.</p>

Analysis, Critical Thinking & Evaluation

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<p>Pro & Con Grid Students identify pros and cons associated with a particular act, event, issue, etc.</p> <p>Categorizing Grid Students sort a scrambled list of terms, images, equations, or other items predefined categories.</p> <p>Defining Features Matrix Students categorize concepts according to the presence or absence of important defining characteristics.</p>	<p>Individually or in groups, use a shared document in Teams or Google in real time or on a shared screen.</p>	<p>Individually or in groups, use a shared document in Teams or Google in real time or on a shared screen.</p>	<p>Use a shared presentation Teams or google to categorize features. Share presentations and report out to others.</p> <p>Consider using appropriately spaced white boards and/or poster boards to share a grid or matrix.</p>
<p>Analytic Memo Students write a one- or two-page analysis (briefing memo, white paper, etc.) of a specific problem or issue, usually directed towards a particular audience. Peers provide feedback using a prompt: <i>Sample prompt: (Someone) wanted _____ but _____, so _____ based on the memo.</i></p>	<p>Students compose memo before class. Memos are emailed to a partner during class and partners summarize memo.</p>	<p>Students compose memo outside of class and post on a discussion board in the LMS. Students choose a memo and provide feedback to the author based on a rubric.</p>	<p>Students compose memo before class. Memos are emailed to a partner during class and partners summarize memo</p>

Synthesis and Creative Thinking

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<p>Concept Map Students construct diagrams showing mental connections between a major concept and other concepts learned. Documenting and explaining connections among concepts helps students recognize their capacity to engage in complex thought processes. Instructors can trace the connections to understand errors in students' thinking processes.</p>	<p>Use Google Draw or other collaborative tool so students can work collaboratively <i>in real-time</i> to add to the concept map.</p>	<p>Use Google Draw or other collaborative tool so students can work collaboratively to add to the concept map <i>over the course of a module</i>.</p>	<p>Use Google Draw or other collaborative tool so students can work collaboratively <i>in real-time</i> to add to the concept map.</p>
<p>“So What” Paragraph After presenting or discussing a main topic, ask students, “So What?” What does it all mean? How does it connect to what you’ve already learned? What usefulness does the concept serve? How does it connect to the learning objective for this lesson or course? Ask question that requires them to apply or synthesize information. Give students about 3 minutes to write the paragraph.</p>	<p>Students email the paragraph to a partner or small group. Students meet in MS Teams and give each other feedback on their paragraph. Students nominate other students to read “excellent” paragraphs aloud.</p>	<p>Students post paragraph in LMS. The instructor reads a sample to determine level of understanding of the bigger concept and uses information to inform teaching.</p>	<p>Students email the paragraph to a partner or small group. In Word or Google, students use the comment feature to provide feedback to their partner’s paragraph. Students nominate other students to read “excellent” paragraphs aloud.</p>
<p>Generate Quiz / Test Questions After presenting or discussing a main topic of a lesson (or at the end of class), ask students to generate 1 or 2 possible questions they think would be on a quiz or test.</p>	<p>Students post questions to a collaborative document. Small groups meet in a Zoom or MS Teams room to discuss their questions. Each team chooses one question to share with the class.</p>	<p>Students post questions to a discussion board in the LMS. The instructor chooses a sample (10%) to read to assess level of understanding of concepts and make instructional decisions.</p>	<p>Small groups meet in Zoom or MS Teams meeting rooms to review each other’s questions and offer feedback.</p>
<p>Invented Dialogue Students synthesize their knowledge of issues, personalities, and historical periods into the form of a carefully structured illustrative conversation.</p>	<p>In pairs, students meet in a virtual group area to write interview questions and responses. Student pairs interview each other using the questions.</p>	<p>Students write, record, and post a video response in the LMS.</p>	<p>Students write interview questions and responses. Students email interview questions and responses to a partner before class. Students pairs conduct the interview at the front of the room.</p>

Problem Solving (Metacognition and Strategies for Solving)

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<p>Fishbowl Students separate into an inner and outer circle as a way to organize a group discussion. Students in the fishbowl (middle) have a discussion while students in the outer circle listen and take notes.</p>	<p>In MS Teams or Zoom, students can take turns role playing/miming a solution and others can watch and respond in chat or live discussion. Encourage students to turn off webcams so focus can be on the student miming.</p>	<p>Students can record themselves with role play/miming a solution and post to a discussion forum. Peers respond to the videos.</p>	<p>Students can take turns role playing or miming a solution for others to critique, watch, etc. in front of the class.</p> <p>Students in fishbowl can be remote (participating in a chat, Google document, or Zoom conversation as a small group), while physically distanced students are outside the fishbowl listening, and then the professor leads the whole class discussion among listeners afterwards.</p>
<p>What's Missing? Students review a problem or scenario and identify the missing elements.</p> <p>Problem Recognition Tasks Students are asked to recognize and identify the particular type of problem each example represents.</p>	<p>In Teams, use slides to present a list of ideas, terms, equation or rationale. Students are asked to recognize and identify the type of problem each example represents. They can respond with what is missing using chat, poll or live discussion.</p>	<p>In Teams, use slides to present a list of ideas, terms, equation or rationale. Students are asked to recognize and identify the type of problem each example represents. Students respond in the discussion forum with what is missing. Can also be done using a lesson or quiz.</p>	<p>Using slides, present a list of ideas, terms, equation or rationale. Individually or in small, distanced groups, students identify what is missing.</p>
<p>Small Group Discussions Instructor poses a question or scenario.</p> <p>What's the Principle? Instructor provides students with a few problems and asks them to state the principle that best applies to each problem.</p>	<p>Use meeting rooms in Zoom or MS Teams to simulate small group discussions. Students may also use collaborative document tools (e.g., Google documents) to record thoughts.</p> <p>Give group assignments and workshop formats for small teams to hold online brainstorm meetings and create things together using collaboration tools between live sessions.</p>	<p>Pose an equivalent question to the asynchronous students, either in video or text, and ask the students to respond in a small group discussion forum. The group reports can be shared to the larger class discussion forum.</p> <p>Ask students to use digital pin boards to share content and have discussions.</p>	<p>Set up small groups of 3-5 students. Pose a question. Could also use a Teams room or google document to help with communication. Could make breakouts a little longer and send groups out of class for easier socially distanced discussion elsewhere on campus with set return time. Reporter may have been writing report in Google document/on handheld white board, or just oral report, and when reporting out consider it practice in projecting voices so all classmates hear.</p>