

Active teaching and learning while teaching online and in person with physical distancing

The chart below – adapted from work started by Dr. Jennifer Baumgartner, Associate Professor at Louisiana State University (see footnote for more details), outlines some common active learning activities and corresponding approaches appropriate for online teaching in synchronous and asynchronous formats as well as how we might adapt them to teaching with physical distancing.

Active Learning Activity	Online Synchronous	Online Asynchronous	Physical Distanced Classroom
Think-pair-share – actively engage students in class	Use breakout meeting rooms in online platforms to first create pairs, then, quads. * See Making the Best of Online Discussions (June 15, Dr. Evan Throop Robinson) for set up (TLC website). Caution: It is estimated that Collaborate can only handle about 10 breakout rooms.	Pose an equivalent question to students, either in video or text, and ask them to respond in their own, previously set up small group discussion forum. Summaries of these discussions can then be shared with the larger class discussion forum. * it might be worthwhile to set up the pairs/quads ahead of time and start with a simpler question.	Using face shields, students may be allowed to have a face-to-face discussion in pairs without physical distancing. When joining with another pair — physical distancing may need to be maintained. Space for this discussion with quads will be needed to facilitate hearing/manage sound. Alternatively — pairs could divide and form new pairs vs. quads and share ideas from each pair discussion. Points can be shared with the full class — ensuring sufficient voice projection.
Small group discussions – actively engage students in class	Use breakout meeting rooms to simulate small group discussions. Students may also use collaborative document tools (e.g.,	Similar to above, create discussion group questions and ask students to respond in a small group discussion forum. Separate threads can be set up	Create small groups of 3-5 students – perhaps these groups can be created ahead of time (Use Microsoft forms to learn more about students and use



	Google docs, OneNote, Jamboards) to record thoughts during these discussions. * Prior to sending students to breakout rooms, make sure they are clear on the questions to discuss, the time line, and the expected outcome. * If it is not students' choice as to which breakout room they will go into, create a slide that identifies the room for each student to enter. NOTE: if it is the first time using a breakout room, provide directions how to get there and how to return. * It may be helpful to have questions and instructions posted in breakout rooms. * It may also be helpful to assign roles – moderator, time keeper, spokesperson, etc.	for each group of students. The group reports can be shared to the larger class discussion forum (or in a synchronous connect with the professor and class) Online collaborative tools can be set up for these groups of students – using Google docs, OneNote, Jamboards, etc. * Make sure instructions are clear – including timeline, expectations, and students' roles should be outlined. * see also tip sheets regarding discussion board on the TLC website	these responses to create discussion groups to be used throughout the term. Pose a question. These questions could be on a PowerPoint screen – along with other instructions pertinent for the discussion (time available, expectations, group member's roles, etc.). If space permits circles can be formed to allow the discussion in the classroom; where possible and as needed use the hallways, or spaces outside and around the classroom too. * Consider providing more time for these discussions and send groups out of the classroom for easier physically distanced discussions elsewhere on campus with a set return time. Could also use breakout rooms or collaborative tools (i.e., OneNote, Jamboard, Google doc) for the discussion in the classroom. When sharing results from the discussion with the class voices need to be projected so all classmates hear. Consider using alternative tools to share information with the class as a whole – whiteboard, online collaborative tools, etc.
Turn and Talk (Stand up, turn	Use the chat feature. Ask a question and let the students reply	Assign partners and pose a question, asking them to share their ideas, in a	As noted in 'think-pair-share', students with face shields can speak face-to-face



around, talk about, sit down) – actively engage in class	with a brief response * use snowball, popcorn, fireworks format i.e., students write response, and wait until professor counts down 3-2-1 send so they all send at the same time (and students write their own response vs. repeating what they see. * Read and comment on responses to the class – make connections, expand, etc. * Could use breakout rooms as discussed in 'think-pair-share' for pairs to discuss, if class size and	Moodle discussion forum for the pair, email or other tools like flipgrid or marco polo. * Alternatively, insert this 'pause' in a PowerPoint presentation with question(s) for students to think about - students could then be expected to submit these responses to professor	in pairs. Allow the conversations to happen; take up responses with the whole class — ensuring students speak loud enough for all to hear
Polling – active engage students in class AND monitor/assess understanding	online platform allows. Use the online polling feature to ask questions and show responses in real-time. * yes/no responses or multiple choice format	Use the polling feature in Moodle and share the results in a class announcement, email, or within the module.	Use an online polling feature (students respond with clickers, phones, etc.); share results with the class in real time. * Alternatively students can respond with their bodies; i.e., – stand up if you agree; raise your hands if you agree; make a letter with your arms/body; use fingers to indicate level of agreement (see other ideas in June 26 Active Learning when Teaching Online; Dr. Angie Kolen and Josh Read, TLC website)
Including students in their note writing – actively engage students in class	Create a set of class notes (i.e., PowerPoints or otherwise) with blanks for important information and share on Moodle (or in	Similar to Online Synchronous – provide students with class notes/PowerPoints with blanks. Students can complete these notes	Similar to Online-Synchronous, provide students with class notes/PowerPoints with blanks that students can fill in during class time.



	whatever way normally shared with students). Encourage students to fill in the blanks during the class session. * it may also be helpful to 'teach' students early on how to add to their notes; sharing what sorts of things should be added, suggested formatting, etc.	when listening to lectures and other audio-recordings they have been asked to listen to.	Also – provide instructions as to how to make more complete notes early on in classes AND allow students time to write these important notes down.
Pausing in lecture – provide opportunities for questions – actively engage students in class	Break up synchronous class presentations by stopping for a quick activity, such as asking for and responding to a question in chat, or completing another task like polling, etc. * we might even ask students to share an emoji as to how they are feeling in the moment/to describe their level of understanding – and then respond accordingly	In recorded videos/PowerPoint voiceovers, insert points for students to pause and reflect on what was just said, complete an activity such as answer some quick questions using a quiz function, or respond to a short answer question. * if notes are 'writeable', these responses can be included as part of their notes * we might even encourage students to get up and move while thinking — interrupting their sedentary time	Pause during lecture to ask a question, give a poll, or ask students to identify (and write down) one or two things they have learned so far in the class and/or key questions that remain * these key things/questions could be collected (via email?), collated and shared with the students at the next class (questions can be addressed then too) * consider allowing movement in this pause to break up sedentary time
Posters/gallery walk/conversation carousel – actively engage students in class	Use breakout rooms for small groups (4-6) to record ideas using collaborative tools such as Padlet, Google docs/slides/draw OneNote, Jamboard to respond When groups have completed the 'gallery walk' the ideas can be shared with the class – potentially with each group responsible for sharing the ideas from one poster	Similar to other group work/discussions, assign small groups to work on the 'gallery walk' topics – perhaps using Google docs, OneNote, Jamboard etc. such that all groups work is combined on one document. * make sure students are clear on the questions/ideas to discuss, the time line, and the expected outcome * once task is complete, summarize	If regulations and space for physically distancing allow, put poster boards around the room. Assign one group of students per poster board to discuss and record responses. After a certain amount of time (and assuming students can move with physical distancing), have students move to the next poster boards – students bringing their own pens with them. Continue until each poster board has been visited. Have students share a summary of results of



	* if it is not students' choice as to which breakout room they will go into, create a slide that identifies the room for each student to enter * make sure students are clear on the questions/ideas to discuss, the time line, the expected outcome * it may be helpful to have the questions/ideas for discussion and instructions posted in breakout rooms * it may also be helpful to assign roles – moderator, time keeper, spokesperson, etc.	ideas and share with students OR ask students to create a video or other type of summary to share their understanding	the poster board they finish at with the class. This activity encourages movement, individual responses, and can serve as an assessment of students' opinions or understanding (depending on the questions).
Fishbowl – actively engage students in class	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. You could also run a "pictionary" version online at https://skribbl.io/ Skribbl allows users to join private rooms, and even to create a specific word bank (i.e., containing terms from class).	Students can record themselves with role play/miming a solution and others can respond in a discussion forum.	Students can take turns role playing or miming a solution for others to critique, watch, etc Students in fishbowl can be remote (participating in a chat, Google doc, or in an online platform as a small group), while F2F students are outside the fishbowl listening, and then professor leads whole class discussion among listeners afterwards.
Quickwrite/Minute paper –	Pose a question or two and have students respond in the chat box.	Pose a question or two in a discussion forum and have students respond.	Pose a question or two and have students write a response in a certain



monitor/assess understanding	Instructors can summarize or ask several students (assigned – i.e., made aware ahead of time) to share a selection of responses or summary with the whole class.	Instructors may follow up by sharing a selection of responses or summary of their responses with the whole class. Or ask students to create summaries of the responses.	amount of time. Further questions can be added and additional writing time given. Students can turn these in at the end of class – either on paper (if that is how written) or electronically (typed or photographs). Instructors may ask for some students to share all or part of their response with the whole class or in pairs.
Muddiest point – monitoring/assessing understanding	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 (one tool that could work is Flipgrid).	Have students use post-it notes – real or via Jamboard or other online tool (anonymous) to share their muddiest point and instructor can summarize and clarify points with the class.
Four corners – reflecting on learning	Students have 4 colored cards. These are held up to the webcam when asked a question to display their answer. * alternatively, students could response with the colour/letter/number in the chat function * alternatively, polls could be used for students to provide their responses.	Students respond to questions using the poll feature in Moodle.	Students have 4 colored cards (or raise hands or stand up/vertical movement to indicate agreement). These are used when asked a question to display their answer. Can also use online polling technology – and students respond with clickers, cell phones, etc.
What's missing? – reflect on learning	In the PowerPoint (or other) presentation, include a list of ideas, terms, equations or rationale – leaving something intentionally out. Students respond with what is missing using chat, poll or live	In the PowerPoint (or other) presentation, include a list of ideas, terms, equations or rationale – leaving something intentionally out. Students respond in the discussion forum with what is missing. Students can identify what is missing	In the PowerPoint (or other) presentation, include a list of ideas, terms, equations or rationale – leaving something intentionally out. Students respond in a live format – using their bodies what is missing (multiple choice – make letters with



	discussion.	using a quiz or some other response tool	hands/arms) * a game like atmosphere could be created – with teams made, points, with students encouraged to 'race' to respond (first one standing?)
Aha wall – reflect on learning	In real time ask students to post an "aha" moment from the class/module in the chat and use these to guide discussion or future instruction.	Ask students to post an "aha" moment in the discussion forum – with directions to explain why this moment was an 'aha' and use these to guide discussion or future instruction. * Perhaps have students also respond to one another's 'aha' moments.	Consider placing poster boards on the wall and asking students to put their ideas up using post-it notes – being careful to follow physical distancing protocols. (perhaps these could be written on a chalk/whiteboards – with students using their own pens and practicing physical distancing when writing) Alternatively, students can share their 'aha' moment/ideas on a handheld dryerase board. Alternatively, Jamboards could be used to collect these thoughts – and viewed I real time during class.
Pro/con list – enhance/strengthen understanding	Together create a pro/con list using a collaborative google document (or OneNote, Jamboard, etc.) in real time or on a shared screen	Together create a pro/con list using a collaborative google document, OneNote, or Jamboard * ensure there is a closing time for sharing ideas; summarize responses once the time is up.	Generate a pro/con list using collaborative documents, such as Google docs, OneNote, Jamboard * Alternatively, if public health guidelines allow, use whiteboard/chalkboard to collect ideas (students use their own pens). * Students could also make suggestions as professors writes on a projected Word document.



Concept map – enhance/strengthen understanding	Use an online tool (such as Mindmeister) to have students work collaboratively in real-time to add to the concept map. Google Draw may also be a tool that would be useful.	Use an online tool (such as ç), to have students work collaboratively to add to the concept map over the course of a module. Google Draw may be a tool that would be useful.	Use an online tool (such as Mindmeister), to have students work collaboratively in real-time to add to the concept map.
Visual prompt – enhance/strengthen understanding	Offer a visual prompt and ask students to respond. This can be done using tools like Voicethread and Annotate.	Offer a visual prompt and ask students to respond. This can be done using tools like Voicethread and Annotate.	Offer a visual prompt and ask students to respond using poll technology * Perhaps ask students to share thoughts with one other in class, then have a larger discussion.
Entry/Exit Tickets – enhance/strengthen understanding	At the beginning and/or end of a class/ module, ask students to respond to a question in the chat or discussion forum or use the polling feature.	At the beginning or end of a class/ module, ask students to respond to a question using the Moodle polling feature.	At the beginning or end of a class/module, ask students to respond to a question. These can be turned in to the instructor – on paper or electronically. Alternatively, a polling program can be used to ask students questions with results shared in real time.
Brainstorming challenge – actively engage students	Use the chat feature or collaborative documents such as Google docs, Jamboard, OneNote, etc. to brainstorm ideas and review in class.	Use collaborative writing spaces such as Moodle Workshop to brainstorm ideas and review in follow-up video/post or activity.	Use collaborative writing spaces (i.e., Jamboard, OneNote, Google docs, etc.) to brainstorm and share in real-time. * Alternatively, if public health guidelines allow, use whiteboard/chalkboard to collect ideas (students use their own pens). * Students could also make suggestions as professors writes on a projected Word document.
1 Minute Quiz – actively engage	Students complete a 3 question quiz worth 3 points in the first 5	Offer a short, alternate activity that allows students to earn the same	Students complete a 3 question quiz worth 3 points in the first 5 minutes of



students	minutes of class. Questions for the quiz are given in the last 5 minutes of the previous class. Answers can be emailed or posted on an adaptive release discussion board post following the class where students provide their responses.	number of points. Online quizzes – with a timeline to respond. Grades/responses provided following the timeline to respond by.	class. Questions for the quiz are given in the last 5 minutes of the previous class. * use an online system (clickers? Cell phones?) to collect responses – so grades can be given? * if short answer, students submit responses – electronically or on paper. * Answers provided after students submit responses (it can be beneficial in multiple choice to explain why the wrong answers are incorrect)
Peer review – obtaining formative feedback	Have students share drafts prior to class and then use breakout rooms for discussion/feedback. * Students can be guided by rubrics. Instructions prior to with examples of constructive/helpful feedback can be shared. Have select students share with the class in real time and provide a way for students to give feedback (possibly use Perusal or a similar tool).	Working with a partner or in small groups, students share drafts of their writing, or read it aloud via Flipgrid. Guided by course rubric/specific prompts for feedback, students read/view and respond to their classmates' writing/work. Peer reviewers evaluate writer's draft preparedness, and writers evaluate reviewers for helpfulness of feedback. * rubrics can be created for both.	Similar to the online classes – but in person. Students can exchange drafts of their writing and provide one another with feedback in real time and in person.

This document inspired by some materials offered by Texas A&M Faculty Teaching Resources:

https://cte.tamu.edu/getattachment/Faculty-Teaching-Resource/2020-04-22-Active-Learning-for-Online-Teaching.pdf.aspx?lang=en-US https://cte.tamu.edu/getattachment/Faculty-Teaching-Resource/Teaching/2019-08-09-getting-started-w-active-learning-guide-update.pdf.aspx?lang=en-US

Check out this article for some tools: Can Active Learning Co-Exist With Physically Distanced Classrooms? Corrigan, Paul T. (14 Apr 2020) Three Strategies for Teaching Writing Remotely During the Pandemic